

**COLLECTION MANAGEMENT IN THE UNIVERSITY LIBRARIES:
POLICIES, PROCEDURES AND USERS' SATISFACTION**

BY

Ghalib Khan



DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

**The Islamia University of Bahawalpur
PAKISTAN**

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A THESIS SUBMITTED TO THE ISLAMIA UNIVERSITY OF
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Abstract

The main objective of this study was to investigate the policies as well as procedures of collection management (CM) adopted by and to explore issues, challenges and impact of ICT, electronic resources and HEC Digital Library on CM and the level of users' satisfaction with these policies and procedures in the university libraries of Khyber Pakhtunkhwa (KPK), province, Pakistan. Mixed methods research design was adopted and the study was completed in three phases. In the first phase, a thorough literature search was carried out by using standard sources and tools for better understanding of theoretical and technical aspects of the study. Major areas covered in literature review include: (i) collection development; (ii) CM; (iii) collection development and management activities in the university libraries internationally and in Pakistan; (iv) factors affecting CM policies and procedures; and (v) the impact of ICT, electronic resources and HEC Digital Library on CM activities in the university libraries of Pakistan. The survey instruments were developed in second phase, which were peer reviewed and pilot tested in order to ensure the validity and reliability of data. Finally, quantitative data about policies and procedures of CM were collected from LIS professionals working in the central libraries of all (26) public and private sector universities of KPK with 100% response rate. Data about users' satisfaction with the policies and procedures of CM were collected from faculty members who were purposively selected, including 10 each from the 26 universities of the province. In total 260, (77%) responses were received and analyzed quantitatively. Interviews with 25 LIS professionals, and 4 senior LIS educationalists were also conducted and qualitatively interpreted for in-depth understanding of phenomena under study.

Data analysis shows a complete absence of formal collection development policies (CDPs) in the university libraries of KPK. All LIS professionals adopt variety of traditional strategies for CM in isolation that are influenced by various factors including library budget, lack of cooperation from faculty and administration; lack of users' needs assessment on regular basis and patterns, nonexistence of CDPs, and conflicts over the selection and acquisition of library materials. The study demonstrates lack of cooperation among university libraries of the province. The applications of ICT and HEC Digital Library seem to have placed an impact on the traditional policies and procedures of CM by providing access to electronic and digital resources. However, due to poor marketing and lack of information and digital literacy on the part of users, the resources of HEC Digital Library are under-used. Users are dissatisfied with the policies and procedures of CM in fulfilling their information needs effectively. The reason behind this is the absence of formal CDPs and communication gaps between faculty, administration and LIS professionals. The study observed that lack of proper interest by library management, insufficient efforts by LIS professionals towards realising their active role for the formulation of written CDPs, absence of proper library committees, lack of coordination with the faculty, administrative problems with authorities and lack of resources in the libraries are the main factors affecting the formulation of written CDPs. According to LIS professionals' viewpoint, faculty and administration seem to be responsible for hindering various library related matters including the allocation of budget and formulation of CDPs and procedures; however LIS educationalists mentioned and literature shows that their passive attitude and lack of dedication towards discharging professional duties are also among the deteriorating factors. The study suggests that despite numerous technical, procedural, psychological and attitudinal issues, LIS professionals', HEC authorities',

university administrations', and library associations' positive role in developing standards for CM can improve the situation. All LIS professionals should develop their administrative skills, knowledge of ICT applications and establish good working relations with faculty and administration and adopt contemporary CM strategies to fulfil the in time educational, research and information needs of the users. This study has practical implications for the stakeholders of the higher education sector in Pakistan including the authorities of federal and provincial ministries of education, HEC, university administration; LIS professionals and library associations to plan effective CM policies and procedures for the libraries of higher education institutions.

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Ghalib Khan

Certificate

This is to certify that the research work described in this thesis is the original work of Mr. Ghalib Khan which he has carried out under my direct supervision. I have personally gone through all the data/results/materials reported in the manuscript and certify their correctness/authenticity to the best of my knowledge. I further certify that the material included in this thesis have not been used in part or full in any manuscript already submitted or in the process of submission in partial/complete fulfillment of the award of any degree from any other institution. I also certify that the thesis has been prepared under my supervision according to the prescribed format and I endorse its evaluation for the award of Ph.D degree through the official procedures of the Islamia University of Bahawalpur.

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Dedication

I dedicate this work to my mother Noor-ul-Huda and father
Mohammad Israil who left no stone unturned to equip me
with the power of knowledge and have always been
praying for my success.

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Chapter 1

1.1 Introduction

Information is regarded as a major economic resource that offers possibilities to individuals, corporations, educational institutions and various levels of other organizations to play their parts in the socio-economic and national development (Elizabeth, 2014; Emojoorho, 2011). This is the reason that provision of information is among the essential infrastructures in a research culture and a priority in any national policy of a country, and has to be spearheaded by those organizations which have a tradition of organization and dissemination of information – the libraries and information centers (Rodríguez-Bravo & Alvite-Díez, 2013).

Latest advances in computer applications and the ever changing patterns of Information and Communication Technologies (ICT) have brought tremendous changes in the way information is generated, stored, organized, accessed, retrieved and utilized. These developments have forced libraries and information centers to reposition their frontiers to provide users with better and fast access to the vast array of information resources they need. The applications of ICT has become an integral part of academic libraries that provide opportunities to the end users to access a wide range of updated, authentic and unlimited sources of information independently of time zones and geographical location. Such developments have not only increased the ability to access, store and process information within the libraries but have also brought significant changes in the concept, organisation, functioning and management of libraries and information centers (Kumar & Reddy, 2014; Peyala, 2011).

Information organization is an area that has received much attention due to the flood of electronic resources (Cho, 2013), which not only have altered the strategies of

collection management (CM) in libraries but also placed significant impact on users' attitudes towards information usage. Heterick, (2012) observed an increased users' reliance on electronic and digital resources, in the aftermath of ICT applications in academic libraries. Dadzie (2005) found that electronic resources complement printed collection in traditional library system. The diversified users' preference towards adopting electronic resources has reduced the allocation of budget for conventional library resources and also impacted the collection development policies in academic libraries. Though, electronic resources do not completely supplement print collection in libraries (Gregory, 2011). However, their existence parallel to print collection is more important in libraries being important research tools for researchers (Dadzie, 2005).

Advanced technological developments have also brought challenging environment for library and information science (LIS) professionals to provide the right bit of information to the right person at the right time, in the right location and in the right format. Under such a challenging environment, LIS professionals are always charged with identifying trends which will have an impact on the way libraries and other information centers function. Several such trends are already placing tremendous pressure on libraries to develop their information collections and provide access to those materials in a more systematic way than had been necessary or possible in the past. One is acutely aware of the reasons: the rapid pace of change; the high rate of book production, journals and other media; the march of technologies; the need for expert collection development staff; rising costs and users' high demand of materials; the greatly reduced buying power of currency and dwindling materials budgets; and the demand for development and sharing library resources through networking and consortia (Johnson, 2014; Evans and Saponaro, 2012; Emojorho, 2011; Gregory, 2011; Johnson, 2009; Evans

and Saponaro, 2005; Evans and Saponaro, 2004). To seriously ignore any one of these factors would be devastating for a library's collection, which would soon lose some of its interest and much of its value to patrons. But to recognize these issues as catalysts may very well be the first step in the present development of and renewed interest in the future of library collections. The importance of all these issues was also addressed and predicted by Robert D. Stueart as early as in 1980 in the famous treatise on collection development in libraries.

University libraries are academic libraries, administered to fulfil the information needs of students, faculty and staff (Nkamnebe, Udem and Nkamnebe, 2014). Reitz (2013) calls it a library or library system established, administrated and funded by a university to meet the information, research and educational needs of the users' community. These libraries are the nerve centres of academic activities in universities and depositories of knowledge, with varied and useful information carried in different kinds of materials. Yang, Yuan, Cheng, and Liu, (2012) refer university libraries the heart of learned societies which help scholars and academicians to achieve their academic and research objectives through effective collection development (Kumar & Reddy, 2014; Kasalu & Ojiambo, 2012).

Effective collection development is an indicator which reflects the mission of an academic institution. Universities libraries help parent organizations to achieve their academic goals and institutional mission through building adequate collections of resources (Owolabi & Akintola, 2010). Therefore, it is necessary to understand relationship between the competing yet complementary resources that comprises university libraries (Gessess, 2000).

Collection Management (CM) is the kind of strategies which are adopted with the purpose to assist the information needs and seeking behaviour of the client population. According to Feather and Sturges, (2003), CM includes; the systematic maintenance of a library's collection, resource allocation, technical processing, preservation and storage, weeding and discarding of stock, and the monitoring and encouragement of collection use.

The primary purpose of university libraries is to support the teaching, learning and research activities of the parent institutions through effective CM. This is in consonance with the mission of Higher Education Commission (HEC) of Pakistan which encourages bringing library services closer to the students and staff to promote and strengthen research culture in the universities of Pakistan. Though, university education in Pakistan is facing critical challenge in meeting the requirements of the 21st century, with ever rising student population, inadequate library facilities, resources coupled with financial issues. However, compared to other type of libraries, university libraries in Pakistan are in better position with respect to collections, organization and staff strength, despite the fact that there still exists a climate of stagnation and decline, mainly due to financial constraints (Haider, 2007b). However, with the best efforts of HEC since 2002 onwards, the situation of university libraries in Pakistan has improved. The HEC has initiated many programmes including HEC Digital Library in 2004 and provided financial support to develop and upgrade the IT infrastructure of university libraries in Pakistan (Said, 2006). These initiatives have placed a positive impact on library enrolment within the universities and the library has become an important source of learning in the digital era.

Khyber Pakhtunkhwa (KPK), formerly the North-West Frontier Province (NWFP) is one of the four provinces of Pakistan, where higher education is generally provided through public and private sector universities and Degree Awarding Institutions (DAIs). These academic institutions follow the curriculum and standards prescribed by the HEC. There were 15 public and 9 private sector universities, chartered by the Government of KPK and recognized by HEC, as on November, 2012. However, the number of these universities has increased as the provincial government approved the establishment of more universities, namely; Bacha Khan University at Charsadda District, Khushal Khan Khattak University at Karak, District and University of Swabi at Swabi District.

The Higher Education Commission has recently started Quality and Research Based Ranking System of Pakistani universities and DAIs. This was taken up by HEC with the objective to promote and improve the quality of education and research in Pakistan (Higher Education Commission [HEC], 2013). This new focus on Research Based Ranking System of universities has put a considerable pressure and responsibilities on the university libraries of KPK. They are now expected to meet the information needs of the academic community and researchers/students at Master, M.Phil, and even Doctoral level.

The budget for higher education in Pakistan has now been drastically cut every year since 2009 (Khan, 2011). These fiscal constraints in the universities have reduced financial support to their libraries in real terms. Increases in materials budgets have not kept up with inflation. This shows that instead of expanding collections, university libraries in the province have been obsessed to maintain their old collection sizes and if weeding has taken place then it would mean that collections have shrunk in size. In the

face of financial constraints combined with ever-rising inflation and recession in the economy, has affected the quality of services and resources of university libraries in KPK.

The rapid evolution of ICTs has prompted large stocks of electronic resources in the university libraries (Mutula and Makondo, 2003) transforming the traditional form of libraries making the process of CM more complicated. This has created pressure for both LIS professionals and users to continue learning in order to provide effective service and make adequate use of the library collection. Access to HEC Digital Library, increases in free and subscribed online databases, digital and electronic resources available on the internet has changed the information needs and seeking behaviour and consequently the need and usage frequency of university libraries in KPK. These changes are further forcing them to improve and modify the services and resources to meet the changing information needs of researchers and academic communities.

In the wake of these developments, it is necessary to analyse the policies and procedure of CM of the university libraries of KPK and their effectiveness through measuring users' satisfaction, as they have to support the information needs of students, researchers and academic communities respectively.

1.2 Statement of the Problem

Since, the late eighty's onwards, there has been a significant change in the higher education sector of Pakistan, stimulated by the applications of ICT, the growth of information, rising and changing demands of users and student enrolments, competition among the information services providing sectors, and the need of quality education for national reconstruction and social development. Generally, development in scientific research and learning has influenced the need for changes in university pedagogy.

Academic libraries within universities are known as gateways to information and play a key role in research and development process and support the educational, teaching and academic research needs of the parent institutions they serve. A major indicator of good university libraries is the quality and quantity of collections through which they achieve the academic mission and goals of parent institutions. In order to accomplish these objectives, support learning and promote/uplift research productivity in the universities, effective collection development is a pre-requisite in the university libraries. Because no university can accomplish its tasks of spreading knowledge and expanding its frontiers till it has not provided its library with an outstanding collection of resources.

Collection management is a topic that has gained much importance in the current information society and widely explored worldwide in the context of university library environment. It is the most important programme of any academic library, driven by goals and objectives of the institutions. The aim of CM is to create a repository or gateway to information for scholars and to capture the intellectual heritage of the prevailing culture in order to benefit future learners and thinker. Economic changes, high rate of book production, journals and other electronic media, their rising costs, and the developing ICT sector have transformed CM to ensure access to information needed by the users more efficiently and effectively. A stage of development has been reached where information can be accessed by a larger number of users in electronic and digital format. Despite the fact that there still exist large repositories of printed information resources, collections of electronic and digital resources are increasing daily in the information market. These changes have forced LIS professionals to think over issues

related to CM and design strategic based policies to overcome such challenges in the university libraries.

In the context of Pakistan previous literature have less documented to address the policies and procedures of CM, while no study has been undertaken to assess users' satisfaction with such kind of policies and procedures with special reference to university libraries in Pakistan. Therefore, this study is conducted to fill this gap by examining the current status of CM policies and procedures adhere to by the university libraries of KPK and users' satisfaction with it. In addition to there are many factors which necessitated the initiation of this study, i.e. shrinking budgets, rising costs and high demand of reading materials, high rate of printing of books and journals at international and low production of the same at national level, march of technologies, introduction of digital and electronic environment in the university libraries, high need for resource sharing, users' satisfaction from the sources and resources of university libraries, the initiation of HEC's Research-Based Ranking System to strengthen the quality of higher education in Pakistan and bring the universities at par with international standards, the establishment of new universities and low production of scholarly publications in Pakistani context on the subject motivated this work.

This study critically examines the policies and procedures of CM in the university libraries of KPK, adopted to satisfy the educational, research and information needs of faculty, researchers and students respectively and their level of satisfaction with it. An analysis has been made to know whether university libraries of KPK possess predetermined/planned policies and strategies to meet users' needs by using both traditional and electronic media or otherwise? This study also attempted to examine the impact of ICT, electronic resources, online database and HEC Digital Library in the

process of CM. Furthermore, the impact of budget cuts, and the alternative strategies adopted by the libraries to fulfil the information needs of users were also covered in this study.

This study, therefore, is more important for the stakeholders of the higher education sector in the province of KPK in specific and Pakistan in general including university administrations (Vice Chancellors, Registrar, Treasurers etc.), LIS professionals and academicians, HEC authorities, Higher Education Department (HED), Higher Education Regulatory Authority (HERA), Directorate of Education, Directorate of Archives, Libraries and Higher Education Archive and Libraries (HEAL), and Ministry of Education, Government of KPK, and Federal Ministry of Education, Government of Pakistan, and Pakistan Library Association (PLA) to adopt it as a policy document for planning effective CM policies and procedures for the university libraries and other institutions of higher learning in Pakistan.

1.3 Objectives of the Study

The main objectives of this study are:

1. To investigate Collection Management (CM) policies as well as procedures adopted by the university libraries of Khyber Pakhtunkhwa (KPK), Pakistan.
2. To study the impact of ICT, electronic resources and HEC Digital Library on CM in the university libraries of KPK.
3. To explore issues and challenges of CM in the university libraries of KPK.
4. To study the level of users' satisfaction with CM policies and procedures adhered to by the university libraries of KPK.
5. To recommend practicable guidelines for CM in the university libraries of KPK.

1.4 Research Questions

To achieve the objectives, following research questions will support and direct the study:

1. What are the policies of CM adopted by the university libraries of KPK, Pakistan?
2. What are the procedures of CM adopted by the university libraries of KPK?
3. What is the impact of ICT, electronic resources and HEC Digital Library on CM in the university libraries of KPK?
4. What are the main issues and challenges of CM in the university libraries of KPK?
5. What is the level of users' satisfaction with CM policies and procedures adhere to by the university libraries of KPK.

1.5 Delimitations and Limitations of the Study

The scope of this study covers both public and private sector universities, chartered by the Government of KPK and recognized by HEC, and established till 31st December, 2012. The population of the study are senior LIS professionals, faculty members, preferably members of the library committees and senior LIS faculty members teaching in the library schools, functioning in the universities of KPK. Apart from it, only the central libraries of the main campuses of the universities have been covered in the study.

When it comes to CM, it is necessary to look at print as well as electronic information resources, as these are all integral parts of the information package made available to academics and researchers. Both print as well as electronic information resources are included in this study.

Limitations of this study also include the scarcity of published literature specifically dealing with CM in the university libraries at local level and non-availability of the most up-to-date foreign literature on the topic under study in the libraries of Pakistan.

1.6 Rationale and Significance of the Study

University libraries play an important role in promoting education and research in all over the world. In Pakistan, university libraries, as compared to other academic and research organizations are equipped with bigger collection, better financial and human resources (Mairaj and Mahmood, 2011). However, presently there exists a stagnation and decline in university libraries, notwithstanding the best efforts made by the government and HEC since 2002 onwards. A review of the literature related to university libraries of Pakistan presents a gloomy picture. The most commonly identified factors, responsible for the current state of affairs have been the out dated traditional collection, dwindling budgets, weak position of Pakistan currency affecting acquisition of foreign materials, lack of leadership, cooperation, physical facilities, and standards, absence of collection development and weeding policies and lack and limited use of ICT facilities have affected university libraries' growth and services in Pakistan (Safique & Mahmood, 2008; Akhtar, 2007; Haider, 2007b, Mahmood, Hameed & Haider, 2006). Bhatti (2012) while studying the current states of affairs of university libraries in Pakistan also found that lack of formal policies, lack of cooperation, financial constraints, and lack of staff, inactive roles of library associations, HEC and library schools are directly affecting university libraries, leaving a serious impact on the cause of higher education in Pakistan. Earlier, Haider (2008) also mentioned that the need to have better libraries in universities is seldom mentioned, which clearly reflects the decline evident in the teaching methods

and the manner in which students study, resulting an insignificant role in the academic progress of the universities in Pakistan.

The literature produced in Pakistan on CM is comparatively small in size. A huge body of literature can be found on CM in the developed countries of the world which has been produced according to their own library environment. However, developing countries including Pakistan lack such type of literature. To keep pace with the current changing environment, there is a dire need of literature on CM related to the university libraries of Pakistan.

This research work, therefore, would have multi-pronged advantages and benefits for the stakeholders of the higher education sector at provincial and national level. This would be of great importance to the university administration and LIS professionals who can largely benefit from the findings of this study to plan effective CM strategies in their university libraries. This study investigated the existing CM strategies and users' satisfaction with it and therefore suggests possible measures for improvement.

Parallel to KPK, the university administrations of the Federally Administrated Areas (FATA) and Northern Areas can also use the findings of this study as a model for developing and managing collection, budget allocation for libraries, resource sharing, access to HEC Digital Library, electronic and digital resources and provision of ICT applications and other similar library plans in their universities and other academic institutions of higher learning.

Same way, the outcomes of this study will equally be useful for the libraries of universities and DAIs of all the provinces of Pakistan including Baluchistan, Punjab, and Sindh and their provincial ministries of education. The Federal Ministry of Education can

also find the outputs of this study useful for the libraries of educational institutions in Pakistan.

In the changing academic environment where new universities and institutions of higher education have been established and more are expected to be established in the near future in the province of KPK, this study can help as a guide for planning better policies and procedure of CM for the libraries of these institutions. This change also presupposes that there should be an infrastructure in place to enable academics and researchers to obtain the information they need. Based on the findings, this study subsequently suggests recommendations enabling universities to meet users' needs adequately. These recommendations could also be adopted by individual universities to conform to users' educational, research, and information needs. This research would also benefit the faculty members and researchers by providing them need based policies and strategies in their university libraries to get the right piece of information at the right time, in the right location and in the right format without any wastage of time. It is hoped that results and analysis of the whole situation could not only help to know about various aspects of CM in the university libraries of KPK but would also guide them to set their goals and priorities for maximum academic and research output to improve their Research Based Rankings and show their visibility in terms of research productivity at national and global level.

After consulting experts in the field of librarianship and conducting a comprehensive literature review, the following figure is drawn. This effort was done with the purpose to present the rationale and significance of the study more explicitly in graphical form. (Figure 1.1)

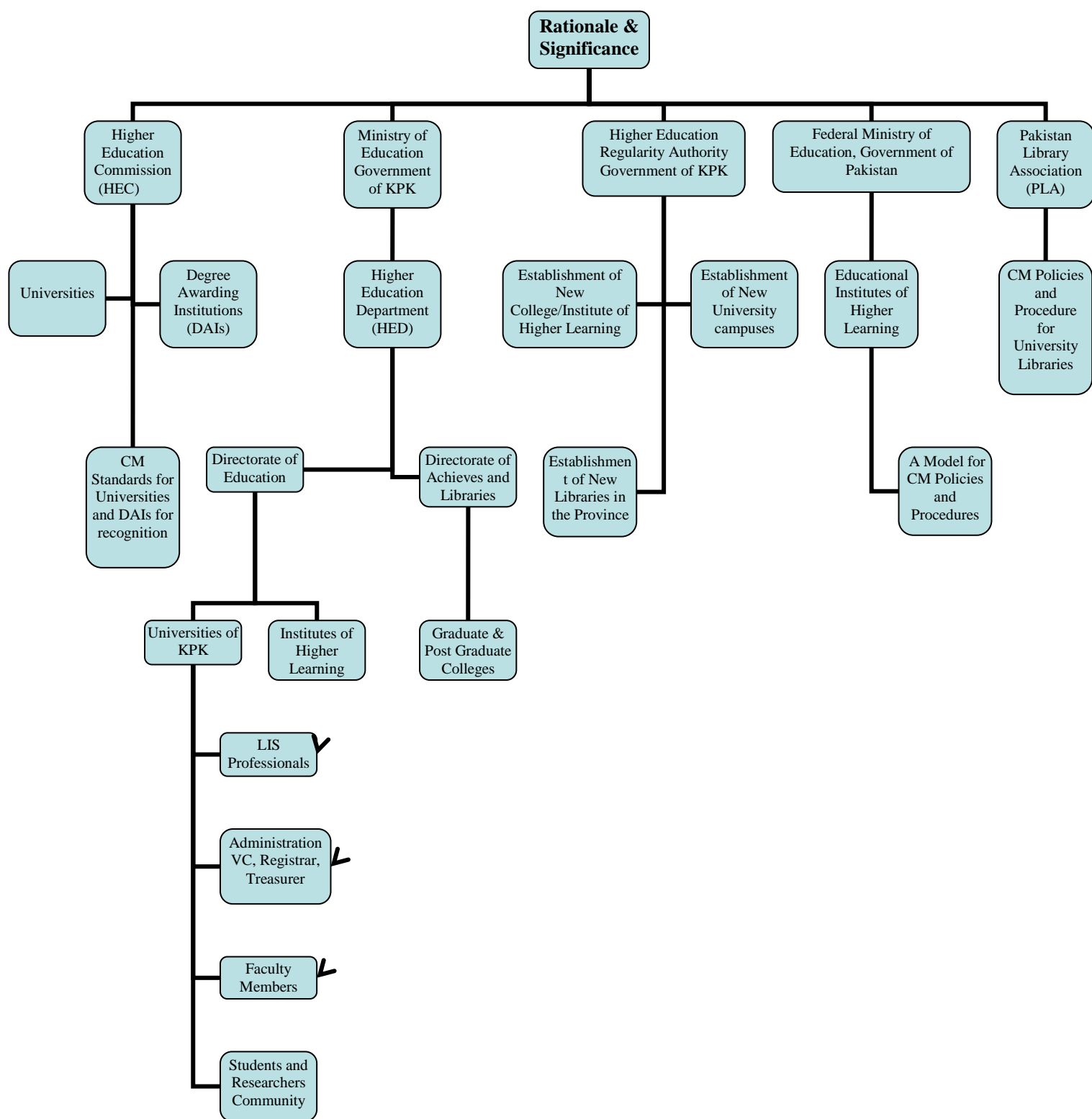


Figure 1.1: Rationale and Significance

1.7 Definition of Terms

1.7.1 Collection Development

Collection development is a process of building collection of materials according to the information needs of client population. It identifies the strengths and weaknesses of library collection and attempts to correct existing weaknesses, if any (Evans & Saponaro, 2005). Osburn (1979) calls it “a system of public services, which characterizes the process of making decisions that determine the suitability of acquiring and conserving materials in the library”. It is a universal process in which library professionals collect a variety of materials in order to satisfy the demands of the users. It brings together six elements in its cycle: user study, policies, selection, acquisition, weeding and evaluation (Evans & Saponaro, 2004).

1.7.2 Collection Management

Collection Management (CM) is a broad term that has replaced the narrower “collection building” and “collection development” of former decades. In its present manifestation CM includes: Planning and funding, collection development, book selection, acquisitions, and provision of access, use, maintenance, evaluation, preservation, and weeding. It thus, encompasses the activities which are traditionally associated with collection development – “the selection and acquisition of library material”. However, it is more comprehensive, and includes the systematic maintenance of a library’s collection, resource allocation, technical processing, preservation and storage, weeding and discarding of stock, and the monitoring and encouragement of collection use (Feather & Sturges, 2003).

1.7.3 Collection Development Policy (CDP)

Collection development policy (CDP) is a document which defines the scope of a library's existing collections, plan for the continuing development of resources, identify collection strengths, and outline the relationship between selection philosophy and the institution's goals, general selection criteria, and intellectual freedom (ALA, 1996).

It describes the collection (on-site and remote access) and plans for how it will be developed. It is a systematic, comprehensive and detailed document, which serves multiple purposes as a resource for public planning, allocation, information, administration, and training (Joanne, 1996).

1.7.5 Policy

Pauline Atherton refers a policy as “a formulation or general declaration of intention that helps to translate the objectives of the programs into realization, supplying administrative guidelines for making decisions and its implementation” (1978).

1.7.6 Procedures

According to the Webster’s Encyclopaedic Unabridged Dictionary of the English Language (2001), procedure means “a manner of proceeding; a way of performing or affecting something, a series of steps taken to accomplish an end”. In the field of library and information science it means a set of established forms or methods for conducting the affairs of a library.

1.7.7 HEC Digital Library

The Digital Library which has made online access to electronic databases, e-brary, e-books, e-journals and open access to public and private sectors universities in KPK.

1.7.8 Public Sector Universities

All those universities which have been established and chartered by the government of KPK and recognized by HEC, till 31st December, 2012 in the public sector.

1.7.9 Private Sector Universities

All those universities which have been established and chartered by the government of KPK and recognized by HEC, till 31st December, 2012 in the private sector.

1.7.10 Electronic Resources

Electronic resources include journals, books, manuscripts, maps, magazines, theses, research reports, databases, websites, online catalogues, and electronic documents (Armide & Bolrinwa, 2010; Sharma, 2009; Ibrahim, 2004).

1.7.11 Satisfaction

Tessier, Crouch and Atherton (1977) stated that satisfaction is “ultimately a state experienced inside a user’s mind and therefore, can be both an intellectual and emotional response of an individual. Satisfaction has a co-relation with the effectiveness which intends to evaluate the performance of an information system (Jeng, 2005). In this study it refers to the effectiveness of CM policies and procedures of the university libraries of KPK in fulfilling the information needs of the faculty members.

1.8 Organization of the Study

The study is organized in five chapters including references and appendices.

Chapter No 1: Introduction

This chapter includes an introduction that describes the background of the study, statement of the problem, objectives of the study, research questions, delimitations and limitations, rationale and significance of the study, definitions of the terms and organization of the study.

Chapter No 2: Literature Review

Chapter two consists of review of the relevant literature. It explains and discusses various aspects of collection development and CM, their main difference and influential factors affecting them. This chapter also present a brief but concise scenario of CM activities in the university libraries of Pakistan. The conceptual frame work of the study and various issues aroused in the aftermath of ICT, electronic resources and HEC Digital Library is also presented in this section. All topics in this chapter have been discussed keeping to fore the national and international scenario.

Chapter No 3: Research Methodology

This chapter presents the research designed adopted to achieve objectives of the study along with procedures of literature search, construction and validation of data collection tools, process of data collection through questionnaires and interviews schedules, data analysis and ethical consideration followed in the research process.

Chapter No. 4: Data Analysis and Interpretation

This chapter comprises of two sections.

The first section presents the quantitative analyses and interpretation of the data collected through questionnaire survey. The second section presents the qualitative analyses and interpretation of the data collected through personal interviews.

Chapter No 5: Summary of the Findings, Conclusions and Recommendations

This presents a summary of the study, draws conclusions, and makes recommendations.

The appendices contain data collection instruments, covering letters, information about universities and other relevant information.

A reference list of information sources cited in the study is provided at the end.

Chapter 2

Literature Review

2.1 Introduction

Since the dawn of the civilization, mankind has been striving to know the unknown. On the long voyage of exploration of unknown, man has collected uncountable pearls and pebbles of knowledge and tried to preserve them. Undoubtedly, this is a very fundamental attitude of mankind that initiated the concept of preservation of thought contents or knowledge, that concept of preservation gave rise the concept of library latter on and that knowledge are bringing in various form of library collection (Mal, 2011). Libraries have been instrumental in preserving and transmitting our intellectual legacy to the next succeeding generations. Libraries connect us with our ancestors by collecting different types of knowledge resources. Due to change in the nature of collection i.e. “from clay tablets to digital tablets (CD ROM) and from papyrus rolls to web scrolls” libraries enabled us generation after generation to live in a world of collective awareness (Ameen, 2004).

Collection means the holding of materials. In library aspects collection means several types of books and non-books materials. These include books, periodicals, theses and dissertations, reports, reviews, proceedings, pamphlets, maps, atlases, globes, paintings, photographs, illustrations, manuscripts, microfilms, microfiches, slides, and A/V materials etc. With the advent of electronic media, computerized databases, e-books, e-journals, and other similar kinds of materials constitute library collection in addition to books and other reading materials (Mal, 2011).

To develop and maintain collections has been the nucleus of any library. Buckland (1999), states that in the “mind’s eye”, libraries and their collections are almost synonymous. Collection building is a vital process in creating and building of a library

collection to serve the educational, informational, recreational and other needs of the users. The process includes selection and de-selection of current and retrospective materials, continuous acquisition, preservation and evaluation of collections to determine how well they serve user needs. Over all collection building involves many library procedures ranging from selection to the withdrawal of materials. The library collection does not mean the holding of particular library which is owned, but which it can collect on loan from some other sources as well as has access to collections and databases, conventional or electronic (Vohra, 2003).

Different experts have classified library collection into various categories.

Common to most are traditional collection and e-collection. Based on the arguments of experts and keeping in view the new developments to fore Mal (2011) have classified library collection, presented in the following diagrams (Figures 2.1 & 2.2);

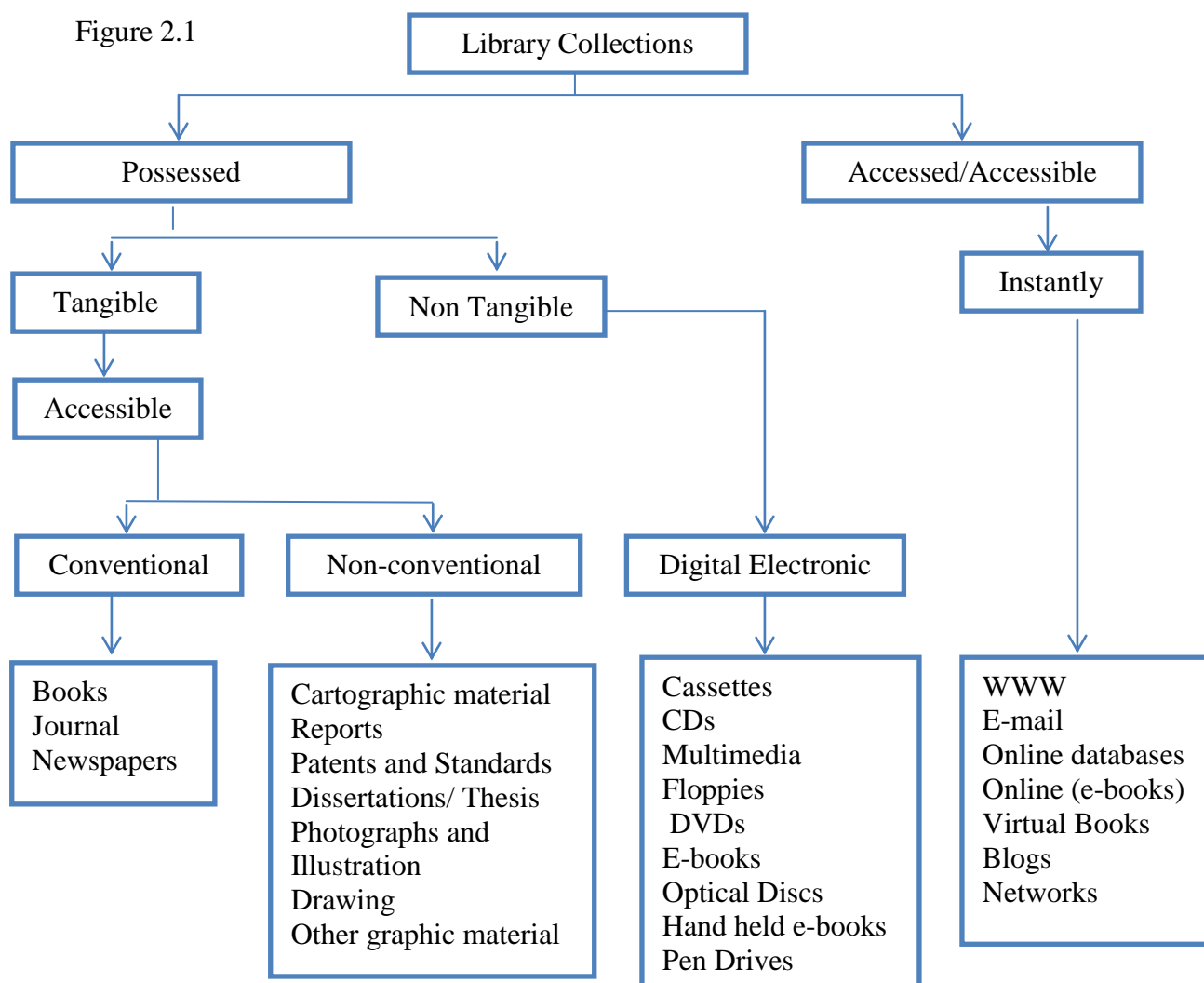
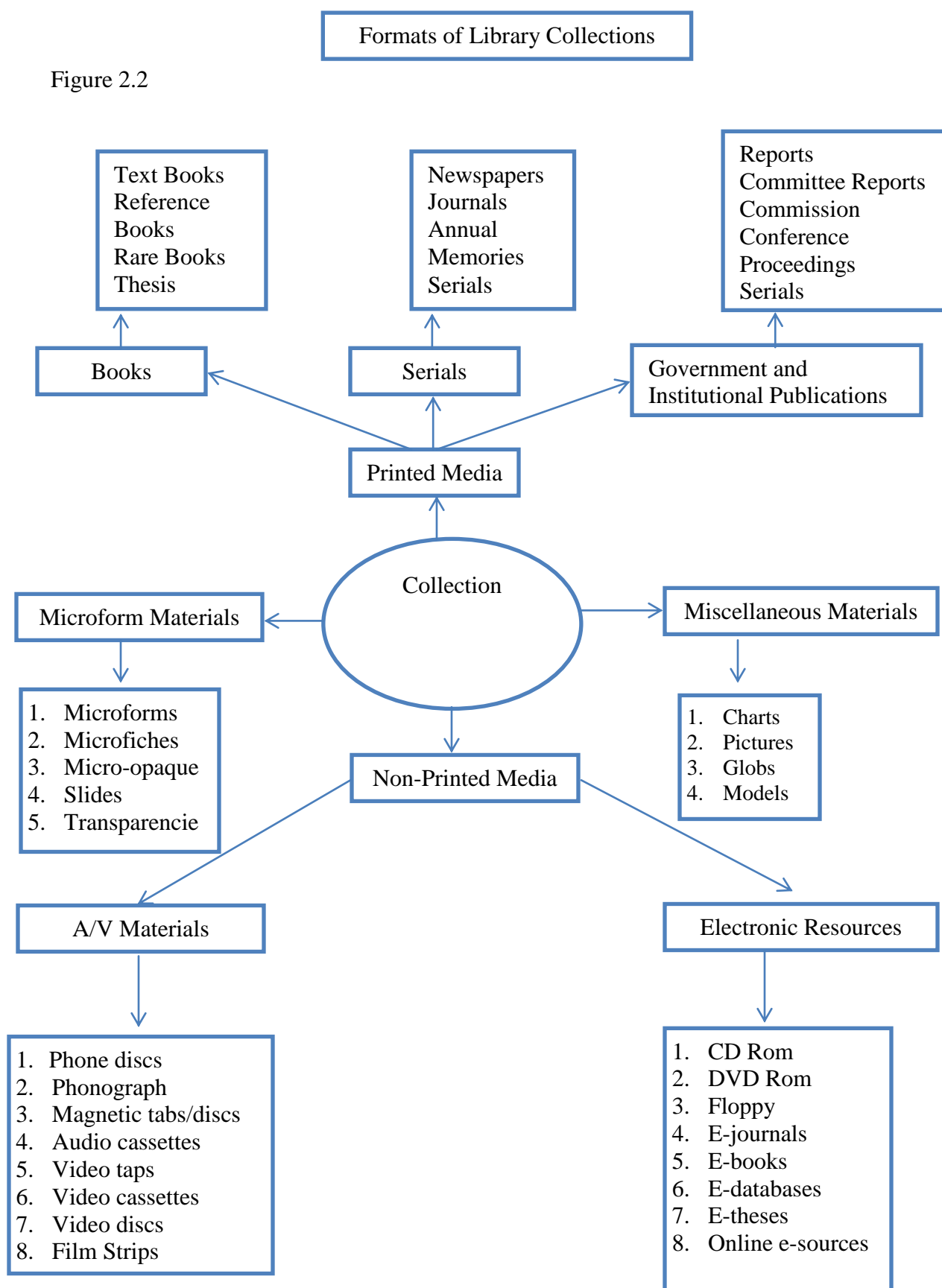


Figure 2.2



2.2 Collection Development

In libraries and information centers, collection development is considered an essential element of the information life cycle. It is the most significant processes in the effective performance of any unit of information (Vignau & Meneses, 2005). Adams and Noel (2008) describe collection development as the most important factor for library quality and among the most expensive aspects of library operations. Atkinson (1998) defines collection development as “the programs and processes by which library materials are selected”. However, this definition seems to be too general to explain the concept of collection development. Reitz (2013) provides a more accurate definition when he states: “collection development is the process of planning and acquiring a balanced collection of library materials over a period of years, based on an on-going assessment of the information needs of the library’s clientele, analysis of usage statistics and demographic projection”. Feather and Sturges (2003) define collection development as “the process of planning a library’s program for acquisitions and disposals, focusing on the building of collections in the context of the institution’s CM policy”. According to Evans and Saponaro (2005) collection development is “the process of identifying the strengths and weaknesses of a library’s materials collection in terms of patron needs, community resources, and attempting to correct existing weaknesses if any”.

A common factor in these definitions is “the needs of the users” for whom the collection is developed. This factor appears to be a distinct element for collection development which differentiates collection development from “selection” and “acquisition” which until now was considered the genesis of the information cycle (Vignau & Meneses, 2005).

Collection development is a universal process for libraries and information centres. The process of collection development comprises six major components, community

analysis, selection policies, selection, acquisition, de-selection, and evaluation (Evans & Zarnosky, 2004, Evans & Saponaro, 2005). Figure 3 illustrates these six components in graphical form.

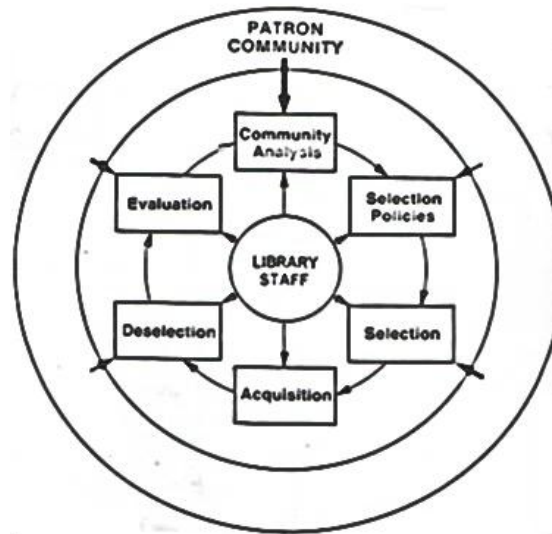


Figure 2.3: Collection Development Process (Evans & Zarnosky, 2004, Evans & Saponaro, 2005).

In terms of functional aspects, various researchers have described collection development process in different ways, depending upon their libraries environment. However, the review of literature show, that Evans modal of collection development has been a prototype design for all. Most of researchers and experts have mounted their postulates and descriptions of collection development process on his modal. To mention few are;

Kasalu and Ojiambo (2012) describe collection development process, analysing users' needs, establishing a collection development policy framework, selection, acquisition, collection evaluation and de-selection. According to Johnson (2009) collection development process includes, selecting materials, CDP, collection maintenance, budget, users' needs assessment, and collection evaluation. She also includes cooperation and resource sharing in the process of collection development. Gessesse (2000) states, the process of collection development includes, planning, goal-setting, decision making, budgeting, acquisition of

materials, and collection evaluation. Van Zijl (2005) notes community analysis, developing collection development, policies, critical selection, format selection, acquisition, collection analysis and evaluation, weeding and evaluation of the external infrastructure for resource sharing and duplication avoidance, the crucial elements of collection development process.

All these statements and illustrations show resemblance with Evans modal in one way or other. Most of them are the commentary form of his modal or the expansion of his statements.

To the elements, Evans believes to be central to collection development, Gorman & Miller (1997) add “policy issues” Moskowitz (1984) adds “budgeting” and “allocating” as the important elements of collection development. Moskowitz further stressed that systematic building of a library collection must be based on meaningful data rather than subjective choice or chance. Horward (2009) suggests continued examination of the collection for the purpose to determine and support new areas of research.

The recent advancement in the ICT, use of web technologies and electronic resources has brought about a revolutionary change in the library’s landscape. It has affected the selection and acquisition process of collection development. Collections are changing relentlessly from print to digital and electronic format. Therefore, this change presupposes that electronic resources must also be included in the collection development process.

Taking all the above into consideration, collection development is the policies, standards and guidelines whereby information resources (traditional or digital) are selected and acquired with the view to developing a balanced, easily accessible collection of information material which will meet the information needs of all users’ community of that collection.

The literature on collection development is vast. General treatments of academic library collection development include Vignau, and Meneses (2005), Gessesse (2000), Taylor (1999), Nisonger (1999), Seth, Ramesh, and Sahu (1997), Rowley and Black (1996), Susana, and Wessels (1995). Case studies of Sinha and Tucker (2005), Maharana, Choudhury, and Dutta (2004), and Andrada and Vergueiro (1996) are related to explorations of individual libraries of particular countries. Arlitch and Johnson (2005), Leung (2005), Nikolaidou et al. (2005), Ashoor (2005), Cole and Shreeves (2004), and Kiondo (2004) discussed digital collections in their studies. Works on metadata systems and software has been of particular interest to Calanag, Tabata, and Sugimoto (2004), and Mutula and Makondo (2003), and Bekaert, et al. (2002).

2.3 Collection Management

Collection management (CM) was proposed as a concept in the 1980s. It was used as an umbrella term subsuming collection development in its structure. According to this construct, CM includes collection development and an expanded suite of decisions (Johnson, 2009) and has become a professional discipline in archives and libraries since 2001 (Poole, 2009).

Collection management, although closely linked to collection development, is seen by Atkinson (1998) as an expansion of collection development. He too calls it “an umbrella term under which collection development is subsumed”.

In Pakistan, the review of local literature depicts that collection development and CM were used overlapping terms till 1980. However, due to technological advancements in the field of librarianship, experts started differentiating these terms. Though, hardly distinguished by the local library professionals, the literature review demonstrates that these terms carry two different concepts (Johnson, 2014; Evans and Saponaro, 2012; Emojorho,

2011; Gregory, 2011; Johnson, 2009; Evans and Saponaro, 2005; Evans and Saponaro, 2004).

Gorman and Miller (1997) while studying the evolution of collection development to CM also found that due to the overlapping nature, the two areas together are difficult to define. In terms of functional aspects, CM has been described by various authors. According to Poole (2009) CM involves a wide range of inter-related activities including: Collections development (acquisition, disposal, loan or transfer) Risk management (conservation, security, environmental control) Stock management (documentation, cataloguing, digitisation) Access management (interpretation, rights management, knowledge) Legal Compliance (evidence of ownership, good governance). Kennedy (2006) refers CM as “the set of interrelated activities involved in building and maintaining a collection of library resources to serve the needs and wants of its clients”. Atkinson (1998) calls it the process of making collections available to users.

Rapid developments in ICT have brought an enormous transformation in the traditional form of libraries and their collections, transforming the services, users’ expectation and staff responsibilities. Expansions in the higher education sector, scholarships and library collections have greatly influenced the evolution of CM (Branin, Groen & Thorin, 2000). Various definitions of CM depict its breadth, width and depth available in the literature. Feather and Sturges, (2003) comprehensively elaborate the nature of CM as follow:

Collection management is a broad term that has replaced the narrower ‘collection building’ and ‘collection development’ of former decades. In its present manifestation CM includes: Planning and funding, collection development, book selection, acquisitions, provision of access, use, maintenance, evaluation, preservation, and weeding.

The literature shows that there is some diversity in what authors believe to be included in the process of CM. Common to most are housing, preserving and storage of information resources. Van Zijl (2005) added fiscal management and technological support for digital and electronic resources to the process of CM. Kennedy (2006) included selection, acquisition, collection evaluation and de-selection to the tasks of CM. Jenkins and Morley (1999) include selection, acquisition and weeding in the concept of CM. Law (1999) lists as part of the CM: “the allocation of book fund and the balance between books, journals and conservation, the disposition of stock and closed access, the decision to acquire access to electronic resources and other media through purchase or lease; location decisions as between branches of the library and stores; and the monitoring and encouragement of collection use”. Gorman and Miller (1997) add to the tasks performed in CM those of binding, monitoring collections, staffing, systems development, networking, new technology and resource sharing.

Van Zijl (2005) is of the opinion that management of budgets; technological aspects of CM and of making collections easily available to users have to do more with adding value to collections and therefore form part of CM. Keeping in view this point to fore she describes CM as “the process whereby value is added to collection of library materials by ensuring that required information resources in the most appropriate format are easily and speedily accessible to those who require them”.

This description covers traditional, digital, and electronic resources. Collection managers must see to the processing, convenient housing and preservation of information resources as well as the storage thereof in a safe and convenient facility. Since, the concept of adding value is central to the process of CM, therefore, adequate classification and cataloguing also form a part of it.

The review of literature shows that CM has always been more difficult to define. It is a term which “means different things to different people”. There is a wide range of definitions provided by different authors in the literature (Johnson, 2009; Poole, 2009; Van Zijl, 2005; Kennedy 2006; Feather & Sturges, 2003; Fourie, 2001; Law, 1999; Jenkins & Morley, 1999; Gorman & Miller, 1997).

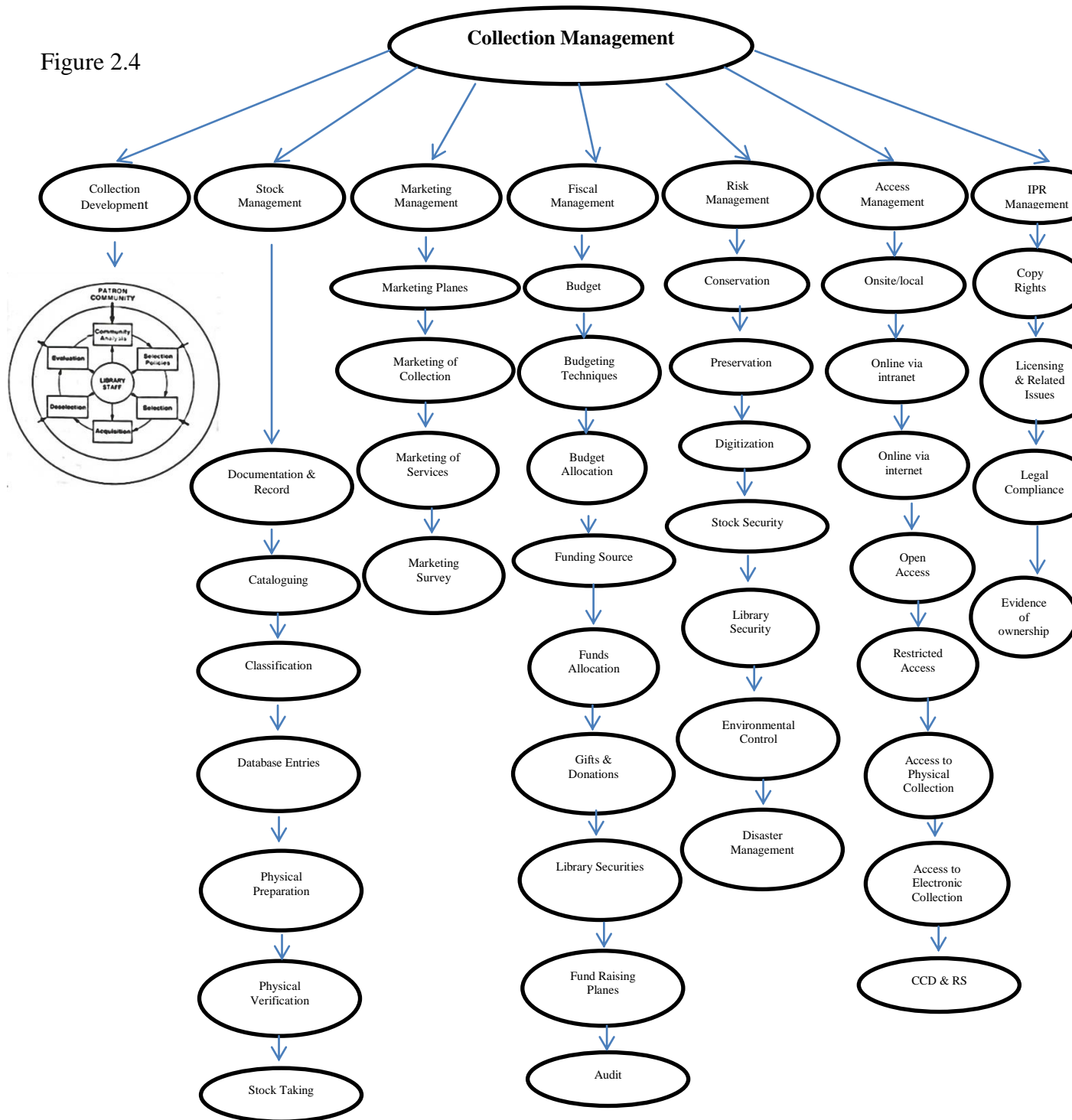
Current shifts in the field of librarianship and information technology has made CM more apparent. Due to this factor, according to Gorman and Miller, (1997) CM has become more complex and multifaceted. The growth of Internet, greater reliance on document delivery and resource sharing, and changes in scholarly communication, rapid shifting driven in parts by information technology and in parts by economic factors, further mean that any definition established today will be different tomorrow. Nevertheless, within this changing environment there are emerging issues that, because of their broad focus, are likely to remain significant as we move from one century to the next.

Based on literature review various activities of CM have been presented in the following Figure (2.4). According to this presentation “CM” is an umbrella term which involves a wide range of related activities, including: Collection Development (Community analysis, Selection policies, Selection, Acquisition, De-selection, and Collection evaluation), Stock Management (Stock documentation and its record maintenance, Cataloguing, Classification, database record management of collection, Physically preparing collection for display in the library for users, Physical verification of collection and stock taking), Marketing Management (Planes for collection promotion, marketing of collection to the users, marketing of different library services, and conducting marketing surveys), Fiscal Management (library budget, application of different budgeting techniques, budget allocation for various items, funding bodies, various funding sources, allocating funds for various library activities, management of gifts and donations, managing library securities

deposited by the users, fund raising plans, and auditing the whole fiscal management), Risk Management (conservation of documents, preservation of materials, digitization of collection, stock security measurements, library building security measures, environmental control initiatives, and planes for disaster management in case of calamities), Access Management (onsite access to documents in the library, online access via intranet in the university premises/on campus access only, online access via internet, open access to documents, restricted to the designated uses' community only, access to physical and e-resources and cooperative collection development and resources sharing programs), Intellectual Property Rights (IPR) Management (handling issues of copy rights and licensing, legal compliance of IPR in case of physical and electronic collection and evidence of ownership of collection, both for physical and electronic collection).

The researcher, preferred to use the term CM for this study being more comprehensive, contemporary, largely accepted and well established in the professional circles at national and international level. Moreover, it is an umbrella term and covers up to date modern theories, practices and issues.

Figure 2.4



2.4 University Libraries in Pakistan

Pakistan is a developing country that came into existence on August 14, 1947, as a result of the partition of British India. According to the census report of 1998, the total population was 135.57 million which has increased to 186.5 million in 2014 (Population Census Organization, 2014). Pakistan is basically an agriculture country where 75% of the population lives in villages with agriculture as the main source of livelihood. Pakistan is a multi-ethnic and multi linguistic state where Urdu is the national and English is the official language. The literacy rate of Pakistan is 50%. Politically, Pakistan is a federation of four provinces (Punjab, Sindh, KPK, and Baluchistan) and the Federal Capital Area of Islamabad. Administratively, the provinces are made up of divisions, districts, and subdivisions.

At the time of Pakistan's birth, there were only two university libraries i.e. University of the Punjab and Sindh University, Hyderabad. Presently there are 158 chartered universities in the country both in public and private sector (HEC, 2014).

The objectives of the university libraries are to support the academic programs of the university by providing relevant information to the user community to fulfil institutional mission and to achieve academic excellence (Nkamnebe, Udem and Nkamnebe, 2014). However, local literature depicts a gloomy picture of university libraries in Pakistan. Lack of organized library services and devotion on the part of LIS professionals (Bhatti & Chohan, 2013) has been the main deterrents due to which the importance of a library as “central organ of the university” or a “core agency” has not yet been recognized in its true sense in Pakistan (Haider, 2003). However, Bhatti, Chohan and Asghar (2014) observed that after the establishment of the HEC in 2002, the scenario of university libraries has improved. HEC Digital Library which was established in 2004 is a core source of electronic

resources, available to all public sector universities in Pakistan. Its access is also available to the private sector universities and DAIs involved in teaching and research.

2.4.1 History of University Libraries in Pakistan

The history of university libraries in Pakistan goes back to 99 years when the University of the Punjab was established by a Special Act of Incorporation by the Government of India in 1882. In fact, this was the fourth university established in the subcontinent after Bombay, Calcutta, and Madras which established in 1857. Until had been 1904, these universities remained only affiliating and examining bodies. They did not direct teaching work but contented themselves by testing the educated in affiliated colleges. The Indian Universities Act of 1904 made an important change and enlarged the function of the universities from merely examining bodies to teaching institutions. It laid down "the provision for the instruction of the students, with power to appoint university professors and lecturers, to hold and manage educational endowments, to erect, equip and maintain university libraries, laboratories and museums" (Akhtar, 2007). This enabled the establishment of the first university library in this part of the sub-continent in Lahore at Punjab University in 1908. The Punjab University remained the only university up to 1947 when Sindh University was established on 14 April, 1947 at Karachi, and shifted to Hyderabad in 1951 (Hanif, 1981).

The first university established following the birth of Pakistan was the University of Peshawar in 1950, but its library was not established until 1951. The University of Karachi was established in 1951, but its library was established in the next year (Akhtar, 2007).

Most of the university libraries in Pakistan were established in the same year as the relevant university. Whenever a university is planned to be established, development of the library is undertaken before anything else. However, in 33% of Pakistani universities, importance of the library was not perceived by the academic planners, which has been quite

a serious shortcoming (Ali, 1990). The public sector universities in Pakistan are financed and supported by the Government through HEC, while private universities are managed and supported by private organizations and individuals. However HEC also provides funds to private sector universities.

2.4.2 The Funding of University Libraries in Pakistan

Haider (1993) describes the funding procedure adopted by the university libraries of Pakistan as follow:

“The universities in Pakistan draw their entire budget from the government through the University Grants Commission. The government grant is supplemented by other sources of income such as students’ fees, occasional private donations and extremely rare bequests. No specific norms are followed in allocating funds to universities. The financial system, controlled by the University Grants Commission requires each teaching department, as well as the library, to prepare estimates of expenditure, which are then submitted to the university’s finance committee for review and approval. (In case of the library, estimates are first discussed and approved by the library committee.) Later, the budget is presented to the university syndicate and the university senate for approval and then submitted to the University Grants Commission for consideration before finally, being submitted to the Federal Finance Ministry. The amount agreed by the government is then disbursed to individual institutions in proportion decided by the Commission in the form of operational funds and capital grants.”

Various formulas for allocating funds to university libraries have been recommended in Pakistan. The recommended figures suggested by library experts are in the range of 5% to 10%. To mention few are; Donovan (1974 and 1984), Sabzwari (1985), Khan and Kazim (1987) and Khurshid (1987b) recommended 5% share for libraries in the total university budget. Qureshi (1982) and Khan (1991), in their doctoral studies recommended 6% and

10% shares respectively in the university budget for libraries. However, none of these recommendations could be implemented because of the negative attitude of authorities towards libraries. Ali (1992) noted that almost all universities in Pakistan allocate less than 5% of their total budgets for libraries. Similarly, based upon a financial survey of fourteen libraries, Khan (1995) also found that the average amount assigned to a university library is hardly 3% of the overall budget of the university. Mahmood, Hameed and Haider (2005) in their study found that university library's share in the total institutional budget ranges between 0.3% and 9 %. Studying the annual fund allocations of 10 university libraries in Pakistan, Mahmood (2004) found that funds to the libraries are provided without any standard formula. Furthermore, the studies of Mahmood, Hameed and Haider (2005) and Mahmood, Hameed and Haider (2006) also found that university libraries in Pakistan do not follow any national or international standards for funding. This has been the main reason that university libraries in the country are under-financed. Mahmood (2004) mentioned that the main causes behind the poor financial position of university libraries in Pakistan are; poor planning and lack of attention of government towards library development in the country, absence of standard formula for fund allocation, price hick, inflation, dwindling budgets, unstable position of Pakistani rupee, poor performance of existing libraries, inefficient administration and lack of professional attitude among the LIS professionals. Local literature presents a gloomy picture of the financial position of university libraries which is badly affecting their collection development and management activities.

2.4.3 Administrative Structure of the University Libraries in Pakistan

Universities in Pakistan have administratively different library structures such as: (i) a central library plus independent subject libraries attached to the departments, institutes, and colleges on campus; (ii) a central library with small seminar or reference libraries in department and institutes; and (iii) only a central library (Khan & Bhatti, 2012). Akhtar

(2007) observed four types of organizational models adopted by the university libraries in Pakistan. These are: (i) a strong central library; (ii) central library with branch/campus libraries; (iii) decentralized library service, with no co-ordination with central library and (iv) central library along with the departmental/seminar libraries.

Both centralized and decentralized university library structures exist in Pakistan. Bhatti (2003) and Ameen (2004) in their doctoral study discovered that in most of the cases, the authority regarding financial grants, administrative, and policy decision in relation to the running of the central library system lies in the hierarchy of syndicate, academic council, and library committee. A library committee usually consists of a chief librarian and nominees from the syndicate, academic council, faculty and administration. The internal management is the responsibility of the chief librarian. However, none of the universities had formed a library committee. These libraries have had collections based mainly on books and serial publications like newspapers, magazines and journals.

Nonetheless, the scenario has changed recently with the establishment of the Program for the Enhancement of Research Information (PERI) in 2004 by the HEC with the help of International Network for the Availability of Scientific Publications (INASP), Oxford. The ultimate goal of INASP is to provide assistance to the developing and transitional countries in information production, access, and dissemination by using information and communication technologies (ICTs) in addition to improve the production and dissemination of national and regional research (Said, 2006).

The HEC-National Digital Library Programme (HEC-NDL) is the showcase of PERI application by HEC in the Pakistan. The application of PERI in terms of HEC-NDL has helped the scholarly community of the Pakistan tremendously in producing quality research. Previously maintaining an expensive, foreign research journals collection was a big problem for university libraries in Pakistan. End-users' desktop access to full text quality journals

and other resources has significantly enhanced the research output and is considered a big support to research programs of all universities (Bhatti, Chohan and Asghar, 2014).

Besides, libraries have been developing digital content at the local level as well. The growth of well-maintained websites is on the rise, but most of them only have a basic introduction to the library on university's home page. A number of them are striving hard to create web OPACs (Mahmood, 2008).

University libraries have been comparatively better in meeting standards of professional, financial, knowledge, and other material resources. The status has further improved after the active role of HEC in providing grants for ICT based infrastructure development in universities. It appears that the future of university libraries in Pakistan is bright if higher authorities keep supporting them. The young university library professionals have also been working hard for their own continuing professional growth to meet the challenges of the digital era (Bhatti, Chohan & Asghar, 2014; Nadeem & Bhatti, 2014).

2.5 Library Education in Pakistan

Current perspective of LIS education in Pakistan shows that nine institutions are engaged in offering theoretical knowledge at degree level (Mustafa and Ansari, 2012). According to the official website of HEC the following universities are offering LIS education in the country (Table 2.1)

Table 2.1

List of Public Sector Universities/Institutions Offering Library & Information Science Education in Pakistan

PUNJAB			
Public Sector Universities/Institutions Offering Library & Information Science Education in Punjab			
S.No	Name of	Location	Offered Programs

	University/Institute					
1.	University of the Punjab	Lahore	Bachelor	Master	MPhil	PhD
2.	The Islamia University of Bahawalpur	Bahawalpur	Bachelor	Master	MPhil	PhD
3.	University of Sargodha	Sargodha	Bachelor	Master	MPhil	PhD
4.	Baha-ud-in Zakria University Multan	Multan	Bachelor	Master	-	-
SINDH						
Public Sector Universities/Institutions Offering Library & Information Science Education in in the Province of Sindh						
S.No	Name of University/Institute	Location	Offered Programs			
1.	University of Karachi	Karachi	Bachelor	Master	MPhil	PhD
2.	University of Sindh, Jamshoro	Hyderabad	Bachelor	Master	MPhil	PhD
KPK						
Public Sector Universities/Institutions Offering Library & Information Science Education in in the Province of KPK						
S.No	Name of University/Institute	Location	Offered Programs			
3.	University of Peshawar	Peshawar	Bachelor	Master	-	-
BALUCHISTAN						
Public Sector Universities/Institutions Offering Library & Information Science Education in in the Province of Baluchistan						
S.No	Name of University/Institute	Location	Offered Programs			
1.	Baluchistan University	Quetta	Bachelor	Master	MPhil	
Federal Capital Islamabad						
Private Sector Universities/Institutions Offering Library & Information Science Education						

in Federal Capital Islamabad						
1.	Allama Iqbal Open University	Islamabad	Bachelor	Master	-	-

Note: Information about these universities/institutions are given in the appendix (List of public sector universities)

Looking to the increasing demands of LIS professionals for higher education, the private sector has also come forward to share responsibility with the public sector universities offering LIS education, mention may be made to Minhaj University Lahore (www.mul.edu.pk), Sarhad University, Peshawar (www.suit.edu.pk), Institute of Social Policy and Research (ISPaR) (www.ispar.edu.pk), Peshawar and Vertex Group of Colleges, Abbottabad (vertexgroup.edu.pk).

Table 2.2

List of Private Sector Universities/Institutions Offering Library & Information Science Education in Pakistan

Punjab					
Private Sector Universities/Institutions Offering Library & Information Science Education in Punjab					
S.No	Name of University/Institute	Location	Offered Programs		
1.	Minhaj University Lahore	Lahore	Bachelor	Master	MPhil
KPK					
Private Sector Universities/Institutions Offering Library & Information Science Education in KPK					
S.No	Name of University/Institute	Location	Offered Programs		
1.	Sarhad University	Peshawar	Bachelor	Master	MS
2.	Institute of Social Policy and Research (ISPaR)	Peshawar	-	-	MS
Federal Capital Islamabad					
Private Sector Universities/Institutions Offering Library & Information Science Education in					

Federal Capital Islamabad					
S.No	Name of University/Institute	Location	Offered Programs		
1.	Vertex Group of Colleges	Islamabad	-	-	MS

Note: Information about these universities/institutions is given in the appendix (List of private sector universities and reference list against their names)

Mustafa and Ansari (2012) also mentioned in their study that Sarhad University of Science and Technology, Peshawar, Muhiyuddine Islamic University, Azad Jamu Kashmir, Al-Khair University, Mirpur, University of Science and Technology, Islamabad and Baha-ud-dine Zakariya University, Multan had disconnected their LIS programs due to certain reasons. However, it was found during the course of this study that Sarhad University of Science and Technology, Peshawar Baha-ud-dine Zakariya University, Multan had restarted their LIS programs.

Undeniably library education in Pakistan has made marvellous progress researching from certificate courses to PhD level. However, there is a lack of uniformity in the schemes of study, courses nomenclature of LIS Schools. The private sector offering LIS education does not have the required sources, resources and reasonable number of regular faculty. Therefore, the quality of education of private sector cannot be compared with public sector in any way (Rehman & Ahmad, 2007).

2.6 Collection Management: The Context of Pakistan

2.6.1 Collection Development in the University Libraries of Pakistan

The concept of collection development was perhaps unknown to the earliest LIS professionals in Pakistan. There was very little acquisition work revolved around donations by both individuals and government (Haider, 2007a). There are more challenges in the collection development activities of the university libraries in Pakistan. These challenges include, dwindling budgets, absence of standards, absence of CDPs, lack of assessments of users and collection, the fast growth of electronic resources, application of ICTs, inactive

role of library association in the formulation of standards, absence of consortial plans and alternative plans are the most common to mention. The review of local literature shows that university libraries in Pakistan develop their collection in isolation, mostly comprising books and journals (Ameen, 2005). In comparison to other types of libraries, they are better stocked and meet the minimum standards of materials resources (Rafiq & Ameen, 2013). Faculty has a major role in the selection and recommendation of library materials, which according to (Ameen & Haider, 2008c; Haider, 2007a) has been creating a wide variation in the collection development process of university libraries. There has also been a hot debate on who should have the responsibility to select and recommend library materials, faculty or LIS professionals, however notwithstanding with this issues there is dire need of collaboration between faculty and LIS professionals for effective collection development in the university libraries of Pakistan.

In Pakistan, acquisitions offer the widest spectrum of problems. To support instruction and research 90 % of books and other reading materials are imported from America and United Kingdom (Haider, 1996). Furthermore the nature of acquiring library materials is collection-centred instead of users-centred. The patron input is not obtained in the collection development process. The print resources are out-dated while journals and magazines are received as gift or under exchange programs. The standard ratio of book per student is far less than it should be. Moreover, foreign exchange rates have also been among big issues in the purchase of foreign books and journals (Rehman & Ahmad, 2007). Subscriptions to online resources provide only access rather than ownership (Ameen, 2005). The libraries remain empty handed after the subscription in over (Haider, 2004). However, the issues of collection development in respect of electronic resources, in the university libraries have been controlled by HEC Digital Library. The electronic resources of HEC Digital Library are made available free of cost to the universities and institutes of

higher learning in Pakistan (Said, 2006) which can help them to access their required information without subscription.

2.6.2 Collection Management across the LIS Curriculum in Pakistan

The review of literature shows that there is a shortage of local literature on CM in the university libraries of Pakistan. However, this has been making room in the library literature and a number of prominent library professionals have worked on it. It this has been included in the curriculum of Library and Information Sciences Schools in Pakistan on the recommendation of HEC.

Haider (2007a) conducted a survey of Library and Information Science Curriculum to know the status of the subject of CM in the universities offering LIS education in Pakistan. The survey found that the universities offering LIS education have included CM in their curriculum as a subject with different nomenclatures i.e. selection and acquisition of material, building library collections, collection development and management, building library collections, collection development and library resources and materials. However, other than Punjab and Multan none of the library schools used the term “Collection Management” for the course. This indicates that the course descriptions seem sketchy with wide variation.

Various literature based information shows that each LIS departments in Pakistan have their own rules and procedures of teaching as per their convenience, mostly based on traditional methods of teaching. The results of various surveys reflect that the curriculum related to CM lacks standardization and varies from university to university. The teachers responsible for teaching of the courses lack practical experience of CM activities (Haider, 2007a). This is the main reason that Ameen (2008b) while studying the perception of university LIS professionals in Pakistan regarding CM activities discovered their low level of awareness about its different elements. Under such circumstances not only the quality of

teaching suffers but the graduates too. The review of literature also found that there is dearth of local literature on the subject. In the absence of local literature, the reading list consists of American and British publications. But in most of the cases the up-to-date editions of books are not available (Ameen & Haider, 2007c).

The whole situation presents a gloomy picture. The absence of trained staff and out dated material has been creating compatibility problems for the LIS graduates in market place. Ameen (2008a) found that LIS professionals in Pakistan are not fully conversant with the changing scenario of CM, both in theory and practice. This shows an impact of out dated curriculum on the professional careers of LIS professionals.

The current situation indicates an urgent need to review the LIS curriculum in Pakistan. Each department should step forward to play its own part; moreover, all LIS departments should unanimously implement the curriculum prepared by the HEC, National Curriculum Revision Committee in Library and Information Science. This would ensure standardization in all respects in LIS curriculum and ultimately the demands of market would be fulfilled in accordance with the new challenges.

2.6.3 Recent Developments in CM in Pakistan

The review of local literature shows studies on different aspects of CM, such as selection of library materials, acquisition, the need of collection development policies, library cooperation, and financial issues etc. The doctoral study by Ameen (2005) completed in the University of the Punjab raised the importance of CM in Pakistan. The number of studies on collection is very few, covering mostly acquisition, selection, collection development, resource sharing, collection sharing (Ameen, 2006; 2008a, Ameen & Haider, 2007c, Haider, 1996, 2003) and other similar areas. The review of literature shows that there is a dearth of local literature on the subject. However, this topic is getting importance

gradually in the library literature. Some of the well-known studies conducted in Pakistani scenario are as under;

A doctorate level study was conducted by Ameen in 2004. The aim of this study was to study the philosophy and framework of CM and its application in university libraries of Pakistan. To achieve the objectives of the study, a mixed-methodology research approach was designed. The study found that traditional ways and aims of maintaining collections, lack of library cooperation and IT trained professionals, and inadaptability to the new trends are the challenges in the area of CM.

Haider (2007b) while studying library scenario and management problems in Pakistan, found that university libraries in Pakistan are better placed with resources, organization, and staff but shrinking budgets and rising inflation have affected its growth and services. He further noticed that the acquisitions environment is impeded by a weak national infrastructure which includes non-existence of CDPs, absence of set patterns for book selection and procurement, inadequate budget allocation, absence of book selection tools, recession in the economy, indeterminate import policy and restrictions, trade embargoes, hurdles at customs clearance; and dearth of competent acquisition staff. He proposed that these problems could be minimized through the formulation of a universal CDP, developed by the large university libraries in consultation with the library committees and academic staff associations.

Ameen and Haider (2007a) studied the challenges of CM in the university libraries of Pakistan. They found that the fundamental challenges regarding CM procedures in Pakistan, are; handling the hybrid character of collections, service to users, and training of CM staff, collection evaluation, resource sharing and preservation. The study concluded that in the evolving paradigm the process of CM is complex, multidimensional and very challenging for the university libraries of Pakistan. Similarly, Ameen (2008b) studied

barriers in collection sharing among the university libraries of Pakistan. She found technical, procedural, and psychological barriers in developing formal collection sharing and suggested a protocol at local and national levels.

The literature on resources sharing in Pakistan is comparatively vast. The studies on resource sharing include; Ameen (2004), Khan (2005), Hanif (2005), Ansari (2005), Mirza (2005), Asjad (2007), Ilyas (2007), Jaswal, (2006), Haider (2003), Ahmed (1996/1997), Attaullah (1991), Begg (1980), (Hanif, 1987, 1988, 1988), Jaswal (1990), Khalid (1997), Khan (1991), Khan (1995), Khan, (1996), Khurshid (1982), Khurshid (1987a), Khurshid (1990), Majid, Eisenschitz and Anwar (1999), Mohajir (1989), and Sharif (2006), Kaul, (1999), Khurshid, (1974), Kohi, 1997), Nitecki and Renfro (2004), Samdani and Mahmood (1999), Shreeves (1997).

2.7 Conceptual Framework

Various studies on CM in the university libraries have come up with conceptual frame work (Owolabi and Akintola, 2010; Gessesse, 2000; Chaputula, 2011; Khan, 2010; Borin and Yi, 2008, 2011; Vignau and Meneses, 2005; Kasalu and Ojiambo, 2012; Kiondo, 2004; Adams and Noel, 2008; Little, 2011; Beals and Gilmour, 2007; Mutula and Makondo, 2003; Kumar, Hussain and Singh, 2008; Taylor, 1999, White and Crwfor, 1997; Agee, 2005; Adams and Noel, 2008; Olaojo, P. O. and Akewukereke, M. A. 2006; Kenselaar, 1996; Akindojutimi, Adewale and Omotayo, 2010; Mangrum and Pozzebon, 2012; Odiini, 1994; Rowley and Black, 1996; Howard, 2007; Davarpanah, 2003; Wittenbach, 2005; Kargbo, 2001; Mandal, and Panda, (2005).; and Shibanda, 1994 etc.).

Many research studies found that comparatively university libraries in Pakistan are in better position with respect to collection, organization and human resources. Various researchers investigated the status of university libraries in Pakistan with respect to their different functions, services, collection, resources and the problem they face. The findings

of these studies indicate that, presently there exists a stagnation and decline in university libraries due to multiple factors. To mention few are financial, corruption, political instability, declining value of Pakistani currency and its ever declining buying power at international market making it more difficult to acquire foreign material, improper planning and lack of proper attention towards it at national and provincial level. However, in spite of these problems, the growth of universities and their libraries has improved significantly. Currently, the total number of HEC recognized universities and degree awarding institutions have reached to 158 (<http://www.hec.gov.pk/OurInstitutes/Pages/Default.aspx>) which were 132 in 2010.

Rapid technological developments have affected almost every activity in the library world. The paradigm of librarianship is clearly changing and the LIS professionals' roles are redefining. Library and information science professionals have become more concerned with CM than other library activity (Singh, 2004). Therefore, effective planning for CM in the university libraries has become indispensable. This fact has been advocated by the authors of developed (Gessesse, 2000; Andrade and Vergueiro, 1996; Wittenbach, 2005; Howard, 2007; Rowley and Black, 1996; Odini, 1994 and Van Zijl, 2005) and developing countries like Pakistan (Ameen, 2005, 2006, 2008a, 2008b; Haider, 1996, 2003, 2007a, 2007b. and Akhtar, 2007).

The study of Ameen (2004) titled "Philosophy and framework of CM and its application in university libraries of Pakistan: An appraisal", also provided a conceptual base for the study in hand. The said study was conducted in 2004 where mixed method was used for collecting data from the target population. The survey included all those public and private sector universities which were chartered till 1996 by HEC. As a result 40 universities were selected for study of which 30 participated and the rest either did not respond refused or were closed by then. Out of these 30 universities, only 4 universities

namely; University of Peshawar, NWFP University of Engineering and Technology, Peshawar, NWFP Agriculture University (now KPK Agriculture University), Peshawar and Gomal University DI Khan and one DAI i.e. Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Swabi were included from KPK. By this ratio 16% participation (Universities 13.3% and DAIs 3.3%) was from KPK, whereas no university or DAI declined or refused to respond to the survey, hence 100% response from the province.

At the present there are 17 public and 9 private sector universities, chartered by the Government of KPK and recognized by HEC. The number of these universities has increased with the establishment of 4 more universities in the province, namely; Bacha Khan University, Charsadda, Khushal Khan Khattak University, Karak, and University of Swabi, Swabi (HED, Government of KPK, 2014).

Keeping in view the above figures to fore, the CM activities of 4 universities of KPK was investigated in 2004. The status of university libraries in 2004 and a decade after, 2014 in KPK would definably have a big difference. The results of CM of 2004 might be relevant but difficult to generalize in the prevailing situation. This provided a gap for further research in the area, especially focusing at the provincial level.

Over the period of time the process of CM has become very challenging and complex. Singh (2004) observed that the set of activities contained in CM i.e. users' needs, collection development policy, selection, acquisition, budgeting, allocation of resources, evaluation of stock, preservation and weeding etc. will continue to evolve as new information and communication products and services as well as increase in the range of possibilities for communicating information. Emojorho (2011) noted that libraries have entered in to an electronic era placing two kinds of effects on the CM of university libraries i.e. first; changes and evolution within the elements of CM and secondly effects of digital and electronic resources on the activities of CM. Ameen (2004) also observed this fact that

philosophy underlying CM work has expanded through the ages due to various social and technological factors.

Therefore, much diversity is expected to have taken place in the CM activities of the university libraries of KPK from 2004 to 2014. However, upon the review of local literature we find that Pakistani librarianship have been facing common problems in almost all kinds of sectors including CM.

Ameen (2008a) while studying the perceptions of university LIS professionals regarding CM in Pakistan found that they were not fully conversant with the changing scenario of CM in both theoretical and practical terms. Similarly Ameen and Haider (2007a) while studying the evolving paradigm and challenges of CM in university libraries of Pakistan found it complex and multidimensional.

Keeping in view all the above mentioned points to fore an extensive study of CM of university libraries of KPK was carried out. Therefore, this research aimed to study the policies as well as procedures of CM in the university libraries of KPK and the impact of ICT and resources of HEC Digital Library on them and users' satisfaction for the purpose to recommend practicable guidelines for an improved CM in the universities of the province.

2.8 Influential Factors Affecting CM Policies and Procedures in Academic Libraries

Comprehensive literature review identifies several factors that influence CM policies and procedures in the university libraries. These factors include users' community, users' needs, CDPs, collection development goals and objectives, selection procedures, format of materials, acquisition management, gifts and donations, fiscal management, access management, marketing of collection, collection evaluation, weeding, preservation and conservation of collection, cooperative collection development and resource sharing. Evans and Saponaro (2005) and Gregory (2011) list these influential factors: information needs assessment, CDPs, selection procedures, type and format of materials, acquisition, fiscal

management, de-selection, collection evaluation, resource sharing, collection protection, and legal issues. Sivadas (2012) has divided these factors into internal factors and external factors. Internal factors include: the institution's missions and objectives, the purpose of the library, the users' community, the present collection and the available resources. External factors contain the government policies, economic conditions and financial support to the institution, academic environment, and publishing, users' attitude towards various types of formats and their information seeking and their attitude towards education. Cooper (1983) noted that selectors of library information resources must take important factors into account, including institutional objectives and plans, users' needs, pattern of use, the scope, strength and weakness of various subject fields in the collection, human and fiscal resources at the library's disposal and cooperative arrangements for sharing of resources.

The details of the most important influential factors affecting CM policies and procedures are discussed as under:

2.8.1 Goals of CM Policies and Procedures

Collection development and management are the two most important programs of any academic library, driven by goals and objectives. The goals of CM are multiple. The aim and objective of CM is to support institutional missions and objectives and promote the educational role of institutions. It helps institutions to promote educational research at regional, national and international level. CM makes material easily accessible and ensures their availability to the users. It rationally develops collection in response to the new research needs within the existing financial resources. In the modern era it aims to develop and maintain a balanced CM program in the light of increasing electronic resources.

Collection development and management maximizes the availability of resources by entering and maintaining collaborative programs. Rowley and Black (1996) believe that the aim and objectives of collection development and management is to carry library's mission

to create a repository or gateway to information for scholars and to capture the intellectual heritage of the prevailing culture in order to benefit future learners and thinkers.

The concepts of creating a repository and a gateway to information are indeed important to the process of CM. Atkinson (1998) states that CM adds value to information sources to fulfil the information needs of users effectively.

2.8.2 Users' Needs Assessment

The mission and goals of any library revolves around meeting the informational, educational, or recreational needs of its clientele. In libraries, users' needs assessments are usually carried out for collection development. However, libraries also do needs assessments for improving various library services, building arrangements, and for administrative purposes (Gregory, 2011).

Users' needs assessment is considered the first step to effective collection development (Jagannathan, 1989). Biblarz, Bosch, and Sugnet (2001) define users' needs assessment as a "process of using one or more techniques to collect and analyse data regarding library users or potential users. Specially, the data collected will be directly or indirectly related to the needs, in the broadest sense, of users, or customers, for information in all formats. Interpretation of the data will influence the management of collection". Knowledge of serving community is the keystone of effective collection development and management. The more collection development staff knows about the work roles, general interest, education, information and communication behaviour, values and related characteristics of potential library users, the more likely it is that collection will be able to provide the necessary information when it is needed (Gregory, 2011).

Building collections which fail to satisfy the information needs of users would be a futile exercise. It is thus essential to ascertain such needs continuously to anticipate users' needs effectively. For the purpose of developing collection development standards and

procedures, it is necessary to study the primary users of the collection, and to find out if there is information routinely sought on a particular topic by researchers and academics. Many researchers (Gregory, 2006; Gregory, 2011, Evans and Saponaro, 2005) suggest users' needs assessment survey practically, however Haas (2000) is of the opinion that it is not always imperative to carry out user analysis projects and surveys. He states that much information can be gleaned by studying syllabi, scholarly sites, departmental websites, curriculum vitae of academics and researchers, current research projects and grant applications, research reports, and even minutes of the academic meetings. Allen (1994) considers valuable to evaluate circulation statistics, interlibrary loan requests, perceptions of patrons and to analyse the size, depth, breadth and growth of the library's collection. Bordeianu and Carter (1996) suggested to the information professionals to constantly interact with academics and students in order to keep up with new courses and programs offered in the academic institutions.

2.8.3 Collection Development Policies (CDPs)

Collection development policies serve as blueprints for the operations of a library. Through these policies libraries carry out their central tasks of acquiring, organizing, and managing library materials (Gregory, 2011). Collection development policies have proven valuable for many collection development and management librarians. Various authors have defined collection development policy according to their own perspective. However, Harte (2006) observed that there is no agreed definition of collection development policies in the literature.

Reitz (2013) defines collection development policy as "a formal written statement of the principles guiding a library's selection of materials, including the criteria used in making selection and de-selection decisions (fields covered, degrees of specialization, levels of difficulty, languages, formats, balance, etc.) and policies concerning gifts and exchanges.

An unambiguously worded collection development policy can be very helpful in responding to challenges from pressure groups.” Kennedy (2006) defines it “as written statements of the policies intended to govern the activities of a library in regard to its collection”. Johnsons (2009) states that: collection development policies provide guidelines within which the library selects and manages its collection. These guidelines are a contract between the library and its community, supplying a framework within which complex decisions are made with consistency and reason. Vickery (2004) has based his statement on the definition of American Library Association which states that “scope and nature of a library’s existing collections and the policies and plan for continuing development of resources, with precise designation of present collection strengths and current collecting intensity in relevant subject fields and a statement of selection philosophy as related to institutional goals, general selection criteria and intellectual freedom”. Fourie (2001) defines CDP as “the written statements that provide planning and implementation guidelines for most collection building tasks”. Fourie further states that CDP contain three kinds of statements

- A statement of objective which has direct bearing on the institution’s mission and philosophy
- A statement of principles which must be flexible enough to cover different situations that might arise
- A statement of implementation including staff procedures to ensure stability in decision making.

Van Zijl (2005) considers this definition and a number of other and concludes that it is “a document drawn up by a specific library to provide guidelines whereby the collection is developed and managed to meet the need of that particular user group. This policy should explain the past, present and future acquisition and CM practices of the library for the edification of bibliographers, other library staff users, sponsors and anyone else who has an

interest in the library in question”. Therefore, according to Harte (2006) the key elements of a CDP appear to be that:

- It is a formal document
- It articulate the history, current practices and future goals of the collection
- It states principles governing a wide range of CM activities

2.8.3.1 Purpose of CDPs

Given the lack of an agreed definition, it is also imperative to consider the purpose of written CDP. However, the precise purpose of CDP will vary according to the characteristics of the library in question as noted by Harte (2006). The review of the relevant literature shows that the primary purpose of written collection development policies are to provide guidelines for selecting library materials, describes steps on weeding (de-selection), retention, preservation and archiving and helps in identifying gaps in the existing collections and provide orientation to new staff. Lorenzen (2009) views CDPs as planning tools which guide selectors and ensure consistency in the policies and procedures of collection development and management. Hoffmann and Wood (2005) consider CDPs as communication instruments with the users, staff, and administrators, and with other libraries and institutions. Martine and Buckwalter (1983) considered that written collection development serve two functions as a:

- Communication device to internal and external stakeholders
- Process of analysing the collection and issues associated with its management

Fourie (2001) also noted that CDPs are good communication tools both internally and externally. Internally CDPs indicate to the parent organization the selection of certain materials in specific subject areas as matter of policy and externally it works as a policy document to communicate with the outside organizations or enter into a network or consortium. Therefore, there are several advantages of having a CDP in a university library.

Breaks (1999) noted that CDP prevents a library from being driven by individual enthusiasms and from buying a random, poorly planned set of resources. Van Zijl (1998) strongly advocates using a CDP as a means of protection which empowers library staff to provide them a framework to take informed and more consistent decisions.

Majority of the scholars and researchers favour written CDPs (Evans & Saponaro, 2012; Johnson, 2014, 2009, and Gregory, 2011 etc.), however, some authors indicated problems surrounding the use of CDPs in academic libraries. According to Snow (1996) CDP is a theoretical and intellectual guide to selection rather than a practical one. Moreover, CDPs are inflexible and unresponsive to change. If the policy is not constantly revised, it loses any value it might have had which is again a difficult job. Similarly, Gregory (2011) also noted that in addition to print materials there has been a rapid infusion of electronic resources. This infusion has strained the rules and guidelines typically found in current CDPs related to printed materials. To give room for the electronic resources libraries must re-examine their collection development policies and update them to reflect the addition of concerns specific to the electronic format.

There is a general consensus among the authors (Van Zijl 2005; 1998; Johnson, 2009; Fourie, 2001; Atkinson, 1986; Budd & Harloe, 1997) in what should be included in a CDP. Gregory (2011) suggests that a good CDP will provide the staff and users with information on library's user community, institutional mission of the library, selection criteria and tools/aids, information about weeding, responsibility of selection, service as a map, guidelines for accepting gifts and donations, cooperative collection development activities, budget, and strengths and weaknesses of collection. He further suggests that CDPs encompassing electronic resources must also include the policy for handling issues associated with electronic resources i.e. cancellation or retention of print resources when the electronic version of the resource become available, Provision of or limitations on remote

access to electronic resources owned or licensed by the library, justification of new costs, possible duplication of e-journals or databases, negotiation of the terms of licenses for use of the materials, and staff training programs.

2.8.4 Collection Development Budgets

Without funding, most library collections would be relatively small, consisting of items individuals no longer wanted and probably of little value to other people. With funding, the potential is almost unlimited, if used wisely and properly. This is how; money spent on materials for the collection constitutes the second largest expense category for the libraries (Evans & Saponaro, 2005).

Academic libraries within the universities are the gate ways to information. In line with the new challenging roles, the vision and mission of university libraries has altered to meet the requirements of the era in the field of research. Taking notice of this situation Rasul and Singh (2010) observed that university libraries are now paying greater attention to fulfil users' needs and support institutional missions and objectives by developing appropriate policies, making funds and providing facilities for research. However, in the last few decades, academic libraries within the universities have had difficulties in keeping up with users and institutional expectations and demands due to budget constraints. There is an overall down trend in the world's economy compelling governments to impose financial cuts on libraries. Information explosion has further placed an increased pressure on the already stretched financial resources of libraries. Users' demands for new information and materials have been growing and they want information sources in a faster and convenient way. Rowley and Black (1996) noted that academic libraries are striving to continue to do what they did in the past and even do more with no additional resources and financial support. However, amongst the greatest problems facing academic libraries are that collection development programs for published materials cannot be brought to fruition due

to high rate of inflation, escalating costs of print journals and books, declining funding from the parent institution and the vast range of formats needed by the users and researcher (Fourie, 2001). Evans and Saponaro (2005) also noted the constant pressure on the materials budget of libraries. They observed that this pressure is the result of declining budget for libraries and rising rate of inflation.

In order to support different academic programs and research projects, a university library must be capable to acquire enough materials to meets users' needs effectively. Leonhardt (1990) said that university libraries could only be capable of effectively fulfilling users' needs if they have large enough budget for this purpose. Research grants and contracts are the major sources of revenue for university, but rarely a portion of these grants and contracts are provided to the university libraries. Though, these grants place a heavy burden on the libraries to provide research literature but they often get a marginal share out of it (Ford, 1999). Looking to this situation Van Zijl (2005) suggests that institutions should acknowledge their library's contribution to the research output and allocate some of the research funding to their libraries.

In the current era, as more emphasis is placed on providing access to information; the scope of collection development budget has expanded overtime. Nowadays, modern academic libraries not only spend on acquiring print material but also subscribe to online resources and pay for their copyright fees, license agreements, document delivery and other relevant issues (Ford 1999).

The problems of budget for university libraries in an underdeveloped country like Pakistan are severe. Local literature shows that poor finance has been the major deterred in providing proper library services. Various formulas for allocating funds to university libraries have been recommended in Pakistan. Majority of the researchers suggested a small

share of 5% in the university budgets. But these recommendations and suggestions were not given proper attention by the concerned authorities.

Internationally, Association of College and Research Libraries (ACRL) have been providing standards and guidelines for academic libraries. ACRL promulgates standards and guidelines to help libraries, academic institutions, and accrediting agencies understand the components of an excellent library. These standards, guidelines, and model statements are reviewed and updated by the membership on a regular basis. In their latest “standards for libraries in higher education” approved by the board of ACRL directors in 2011, no prescribed formula is given for the size of academic library budgets. Instead, libraries are advised to compare their budgets with those of similar institutions i.e. “Section 7.4: The library’s budget is sufficient to provide resources to meet the reasonable expectations of library users when balanced against other institutional needs p.13”. Previously, ACRL recommended 5% in 1959 and 6% in 1986 respectively. However, Moris (1986) was in favour of high percentage than prescribed by ACRL for libraries to overcome past deficiencies or to meet the needs of their new academic programs.

Unfortunately, in Pakistan standards have not been developed for budget allocations at associational level on the pattern of ACRL for academic libraries. Though, literature depicts some individuals’ opinions and recommendations in this regard. Earlier, Pakistan Library Association (PLA) recommended standards for college libraries (Malik, 1983). However, Khan and Bhatti (2014) observed that development of library related standards including library finances have been the main challenge for PLA. In the absence of local standards, academic libraries within the universities do not hire or follow international standards too. This was also noted by Mahmood, Hameed and Haider (2006) in their study that universities in Pakistan do not follow any national or international recommendations for library funding. They further discovered that funds to the university libraries are provided

without any formula. Though, literature reveals that over the years, individuals, library organizations and committees appointed by the government, have suggested various formulas but none of the recommendations was implemented.

As university libraries in KPK both public and private endeavour to develop collections that can support their academic programs and research, therefore it is imperative that sufficient funding be provided to accomplish their objectives. A standing committee as suggested by Shafique and Mahmood (2008) should be developed by HEC, comprising Pakistan Library Association (PLA) representatives, LIS faculty members and senior library professionals to develop standards for academic libraries on the patron of ACRL.

2.8.5 Collection Evaluation

Collection evaluation is the most important measure of collection development (Agee, 2005) which provides quantitative feedback for improving future collection development (Carrigan, 1996). Collection evaluation helps to build a balanced and relevant collection of materials according to the information needs of the users' community. Many researchers consider that collection evaluation is among the core missions of libraries to ensure that they are meeting the information needs of the user and support the educational mission of the parent institution (Henry, Longstaff & Van Kampen, 2008).

In the wake of electronic and digital resources, where libraries access or own them, collection evaluations have become increasingly important in such situation (Dobson, Kushkowski & Gerhard, 1996). Information professionals need to be aware of the current holdings of their libraries so that they are in a better position to make decisions regarding the inclusion or withdrawal of information products.

Library and information science professionals may use several techniques for evaluating collections to gain the most meaningful insights possible (Wallace & Van Fleet, 2001). Agee (2005) suggested three major approaches for collection evaluation: user-centred

evaluation; physical assessment; and specific subject support. Users centred approach is a good method to determine how well the library meet the information needs of the users' community. Sylvia (1998) stated that this approach may focus closely on a specific discipline or be comprehensive. This approach can not only be applied for printed materials but can also be used as a powerful tool in the library online management system. User centred approach provides the best insight for evaluating collection use.

Physical assessment involves a subject specialist, who manually pulls monographs from the shelves and determine if the items should remain in collection or otherwise. This approach is also called collection centred approach. According to Feather and Sturgis (2003) the key to this approach is human, labour and judgment. Physical assessment is a good indicator of the condition of the overall collection. In this approach useful information about collection is collected which includes; physical condition of binding and pages, copyright dates, language, number of copies, density of tiles in the classification area, and many more information. This approach provides an excellent opportunity to list books for de-selection. Moreover, it gives LIS professionals an opportunity to develop an overall awareness of the collection.

In the last assessment approach "assessment of specific subject support" a focus is made on subjects included specifically in the institution's mission statement, library's collection development policy, or it may be an observation of circulation patterns and users requests.

Conspectus method which was a standardized procedure for reporting the present state of a collection through coding has been in use in the developed countries of the world but proved inadequate in the evaluation of libraries' collection of digital media. The reason is that it is collection centred rather than resource access centred. Clayton and Gorman (2002) suggested it's up gradation to take into account the availability of digital data.

The nature of collections has changed rapidly with the infusion of e- journal, books and databases (Agee, 2003) which can be accessed both onsite and remotely (Agee & Antrim, 2003). The focus has shifted from collection to users centred approaches where stress is given on meeting users' needs than the traditional ownership of prescribed numbers of holdings (Calvert, 1997). This process has made collection evaluation more complicated for library professionals to opt which evaluation methods work in the new environment. Nisonger (2003) concludes:

“a major challenge for the library profession early in the third millennium is the identification of evaluation methods (through modification of existing techniques or the development of new ones) appropriate to the hybrid library, incorporating both print and electronic resources”.

A review of the literature shows that the literature on evaluation can be grouped into two basic camps – traditional (criteria based) and new (usage based) – with the majority of published articles looking at either collection development for print resources or collection development for electronic resources. The traditional methods of collection evaluation are not a good fit for the current information and technology environment because of changes in the balance of resources, usage and the philosophy of CM (Borin & Yi, 2008). Many articles acknowledge that collection evaluation is especially necessary in this new hybrid environment but do not propose new measures to do so (Persons, 1998). Newer approaches, currently in an exploratory stage, are slowly emerging to address this new hybrid collection but even here the approach is fragmented. As Casserly (2002), stated in her article, “little has been written about how academic libraries can develop the theoretical constructs that will inform these practices and procedures.” In Gorman and Miller's article (2001) they begin to address this new hybrid collection by suggesting that libraries merge the best qualities of collection-cantered and client-centred evaluation methods combined with

elements focused on use and users. They emphasize the need for new evaluation methods for this changing environment.

There are many micro-level studies looking at one campus or one discipline for one purpose, for example, the case study by Li and Kopper (2006), that looked at the cancellation of print journals in favour of electronic resources at the University of California, Davis Library. In making their decisions they used a number of traditional evaluation methods such as price and faculty demand along with usage statistics and stability of access. Another article by Dinkin's (2003) studied circulation statistics (comparing circulation of items selected by faculty as compared to those selected by LIS professionals) of print resources as one way of assessing users' needs. Other articles look at just one resource type (e.g. electronic journal studies) or are subject area specific. Carole Montgomery's (2002), article which measured the operational and economic implications of an electronic journal collection at Drexel University. The study looked specifically at staffing costs and found that in the switch from print to electronic staff costs and time moved substantially from technical services and circulation to systems departments. As mentioned above Agee (2005), has a narrower focus looking at three specific methods of evaluation – user-centred evaluation, physical assessment and assessment of specific subject support. However, he does encourage LIS professionals to adapt and mix different methods of evaluation to find something that fits their own circumstances.

The review of the literature shows that there is a large body of work on traditional print based collection evaluation; however, the literature that exists to address the new dynamic situation is fragmented and often case based. Because many changes are overtaking libraries, it is even more imperative that LIS professionals are cognizant of their holdings so they may build better future collections. Efficient use of budgets, shelves, staff, and

information seekers' searching time – whether online or in the stacks – are a few of the less often articulated reasons to evaluate collections (Agee, 2005).

2.8.6 Decisions Regarding Collection Development in Academic Libraries

There are several important decisions which should be taken into consideration before developing and managing collections in academic libraries. These decisions include:

2.8.6.1 Responsibility for Selection of Reading Materials in Academic Libraries

The responsibility of selection “who shall select the resources” is considered a central question related to selection policies and procedures. The phrase “who selects” is a fundamental issue in the process of collection development (Ameen & Haider, 2007c). Collection development is a joint venture of faculty and library staff in academic institutions which should be clearly mentioned in the manifesto of academic libraries (Van Zijl, 2005).

The literature on “who shall have the authority for selecting library materials” can be grouped into two camps. One group believes that LIS professionals carry the final responsibility for selection being technically sound and skilled whereas the latter is of the opinion that authority of final selection rests with the faculty members because they know much about their subjects and students, needs. However, it is generally accepted that LIS professionals working in close coordination with faculty are in best position to build a relevant collection according to the information needs of the users' community (De Stefano, 2001; Gordon, 2000; Jagannathan, 1989).

Apart from faculty and LIS professionals participation in the process of selection another important group is the research scholars who according to Bonn (1974) are participating actively in the process of selection. Atkinson (1998) noted that library users, especially research scholars are increasingly involved in the selection of library materials. The participation of this group in the process of selection has increased in the aftermath of the present online environment where users' expectations of what can and should be

included in their libraries have been stimulated. Today's research scholars are aware of what is available in their field of study and are increasingly re-appropriating the role of selector of library materials.

University libraries in Pakistan spend a large portion of their funds on buying books followed by serial publications like newspapers, magazines and journals. The Faculty members play a major role in the selection of books for purchase whilst LIS professionals select most of the reference materials. Their role is merely of facilitators, providing faculty members catalogues, booklists or books on approval. The role of research scholars and students in the process of books selection is considered of little importance. LIS professionals, generally consider that faculty is well aware of students' needs therefore they can select titles for students and themselves. The major role of faculty in the process of selection of library materials creates serious problems. They usefully remain busy in their educational and administrative engagements and do not consider it as their major responsibility and therefore take long to make selection decisions. By the time LIS professionals get approval from faculty they hardly get the required quantity of books on the approval list because the titles are gone out of stock in the market by then (Ameen & Haider, 2007c).

The review of local literature demonstrates that university libraries in Pakistan are still following conventional selection practices. Neither faculty nor LIS professionals have a balanced role in the selection process. This has been affecting the in timely supply of materials and acquisition process. Various studies stress the need for better liaison among faculty, library staff and vendors for quality and in time selection in the university libraries of Pakistan.

2.8.6.2 Formats in Which Materials are Selected

Traditionally, academic libraries collect materials primarily consisting of printed materials both books and journals. Some libraries also collect audio video materials. The revolution of emerging technologies has completely altered the conventional library system. This has been changing the landscapes of librarianship. There has occurred a dramatic shift in the formats in which information is offered to the library users. CD-ROM, e-journals, e-books and World Wide Web are relatively the recent developments. Singh (2004) and Van Zijl (2005) also observed this diversification in the range of electronic formats due to the emergence of new technologies.

The new digital media has changed the paradigm of information provision. The emergence of each new format of information carrier and its inclusion in the traditional library has raised the discussion on the change phenomenon in librarianship and how to deal with it. Review of literature show that users are increasingly relying upon sophisticated technologies for accessing their required information and communicating and sharing research outputs. Though the acceptance of electronic books is comparatively slow than that of electronic journals but both are gradually gaining popularity.

The present economic crunches and rising costs of materials has made electronic resources and networking more appealing. Library and information professionals are now relying more on online system and electronic databases to satisfy users' needs instantly. However, these changes are taking place so rapidly that determining which format to buy and cost effective is a daunting task. Gyeszly (2001) believes that the escalating cost of electronic journals, books and databases available alongside traditional media will soon force library professionals to make decisions between electronic and print produces.

This multiplicity of documents format due to technological developments has made the task of CM more challenging and complex. The proliferation of information sources in

various formats (digital and non-digital) carrying different types of contents (scholarly, reference, and research etc.) has produced a number of implications for CM in the university libraries of Pakistan. However, there is a silence of local literature in this area. Handling the hybrid character of collections in the university libraries is still a fundamental challenge in the area of CM in Pakistan.

2.8.6.3 Access versus Ownership

The emergence of information and communication technology has repositioned the frontier of academic library resources, operations, and services as well as users' expectations. This has made academic libraries struggling to keep their place as a major source of inquiry. Digital technology has not only revolutionized the way information is packaged, processed, stored, and disseminated, but also how users' seek and access information. Before the advent of ICT academic libraries were the sole custodians of information, which was predominantly in print. But in the present era they can no longer restrict themselves to print resources because electronic information is challenging their monopoly. Under these circumstances academic libraries can maintain their place by serving as an access point to both print and electronic resources (Anunobi & Okoye, 2008).

“Access versus ownership” is a familiar phrase in current library literature. The basic discussion of the concept of access versus ownership centres around the crises in material acquisition in academic libraries and the technological forces driving resources sharing. The contributing factors to the perceived crisis in academic libraries are, rising prices, declining budgets, and increased scholarly production (Truesdell, 1994).

The library profession is currently facing a dilemma that could ultimately impact the future of libraries and librarianship. In this rapidly changing age of technology, the traditional view of libraries as “warehouses of information” is being challenged by the more modern view of them as “providers of access to information”. A conflict has emerged

between those in the profession who believe ownership of information is most important and those who consider access to information the most important. It would seem that every library must make a choice between the two. However, there is a third option that could possibly satisfy everyone as well as ensure that libraries continue to be viable and important information centres in the future. This is according to Kane (1997) is the “access and ownership” view.

It is therefore important to take several collection development issues into consideration when deciding between access, ownership or a combination of both. The discussion of access versus ownership is persistent in current library literature. Many contributors to the literature continue to question whether access can perform well enough to substitute for ownership (Truesdell, 1994).

The review of literature depicts three opinions of experts. The first groups called the “futurists” whose views are technology driven and are of the firm belief that libraries will be non-existent in the near future. In their point of view, there will be no books and no print formats. Everything will be accessible through computer and LIS professionals will no longer be needed. The next group of experts is of a traditional view. They believe that libraries will continue to exist as long as there are people who look for knowledge. The last group of experts is of a moderate approach and in favour of both “Access and ownership”.

There are authors who support the last group of experts and believe that it is not necessary to choose between access and or ownership rather the future of libraries can be made stronger by a delicate balance between the two. Information owned and information accessed will become partner and complement and build on one another, transforming libraries into dynamic information centres of the future.

2.8.6.4 Cooperative Collection Development

Escalating materials costs combined with budget constraints and increasing numbers of volumes published are leading libraries to depend more on other libraries and source centres to meet user needs and expectations. Library cooperation is an important part of collection development and management activities. The ability to leverage funds through cooperative purchasing and shared storage facilities and to offer library users access to the world's vast information resources are powerful forces toward cooperation (Johnson, 2009).

Cooperative collection development is “the sharing of responsibilities among two or more libraries for the process of acquiring materials, developing collections, and managing the growth and maintenance of collections in a user-beneficial and cost-beneficial way” (Branin, 1991). The umbrella term used into the mid-1980s was resource sharing and applied broadly to cooperative cataloguing, shared storage facilities, shared preservation activities, interlibrary loan (ILL), and coordinated or cooperative collection development (Kaiser, 1980). The goal of cooperative collection development and management is to improve access to information and resources by maximizing the use of those resources and leveraging available funding (Johnson, 2009).

University libraries have the largest reservoirs of knowledge of information sources. In a networked environment these libraries are developing digital consortium in the developed and developing countries to serve their users in an efficient and economical way. However, this situation is grave in the developing counties like Pakistan. The importance of library cooperation in a developing country like Pakistan cannot be overemphasized. However, this culture has not taken its roots in Pakistan since long. Hiader noted the nonexistence of cooperation among the university libraries of Pakistan as early as in 1974. Ameen (2008b) while studying barriers in collection sharing among the university libraries of Pakistan found that despite ICT facilities in the university libraries of Pakistan there is

hardly any practice of resource sharing in a formal manner. Her study found that there are strong technical, procedural, and psychological barriers in developing a formal resource sharing program.

Local literature depicts that the main reasons behind that absence of resources sharing programs in Pakistan are: paucity of resources, lack of finances, and absence of bibliographic and physical accessibility to limited resources. Previously, LABLNET and MART projects were initiated in Pakistan in the field of business and agriculture but could not be implemented due to the absence of proper planning (Haider, 2003).

To establish cooperative collection development programs in the university libraries Pakistan there is high need of developing standards. This can only be done by the national library associations and organizations in collaboration with provincial and regional library associations.

2.8.6.5 Weeding

Weeding is the process of removing materials from the active collection for withdrawal or transfer. Alternately, this activity is referred to many terms such as “pruning”, “thinning”, “culling”, “de-selection”, “de-accession”, “relegation”, “de-acquisition”, “retirement”, “reverse selection”, “negative selection”, and “book stock control”. Weeding is the most undesirable and the most important and challenging task for libraries (Johnson, 2009; Covey, 2002). Many researchers consider weeding the result of evaluation. However, this is not necessary that collection evaluation is done for weeding purposes only. According to Gregory (2011) collection evaluation does not necessarily imply weeding. Academic libraries can assess specific subject collection in order to develop it for research purposes. They can also perform it for accreditation and recognition purpose prior to the visits of affiliation grating institutions.

In spite of much advocacy by prominent authors like Evan and Saponaro (2005) and Johnson (2009) university LIS professionals avoid weeding in order to prevent controversies from faculty and administration. It is evident from the literature that the importance of evaluation of print and electronic resources is gradually taking place in the developing countries. The main reason for this is the accountability of university libraries to their parent institution. However, one thing is important that productive evaluation needs extensive hard works.

2.8.6.6 Legal Issues in Collection Development and Management

Legal issues are always implicitly or explicitly connected to collection development and management activities. The most obvious areas are copyright and licensing. These concepts have become more important as more and more of any collection's materials are received or made available in electronic form. In this connection Digital Right Management (DRM) software and hardware also present important question for the collection development staff (Gergory, 2011). According to Minow and Lipinski, (2003) LIS professionals are facing legal issues in the collection development and management on a regular basis. Evans and Saponaro (2005) have given a detail account of legal issues and its importance in collection development and management. They state that copyright laws impose some limitation on the use and reproduction of a document. But cooperative collection development efforts, photocopying of printed matters and the use of electronic resources has created some challenges for collection development and management.

2.9 HEC Digital Library and CM in the University Libraries of Pakistan

The ever-changing pattern of ICT has completely altered the conventional library system, transforming library and information services from tangible to intangible formats i.e. virtual, electronic library and more recently digital library. The exponential growth of online resources has placed an impact on the traditional libraries making them less

important (Vartharajan & Chandrashekara, 2007). Searching a piece of information in a traditional way is a cumbersome and time consuming job. Digital libraries are the most efficient and spontaneous responsive institutions, which provide the right information at the right time to the right person.

Due to changes and development in the higher education sector at global and national level, the need for improving and developing the quality of higher education has been taking place in Pakistan (Bhatti, 2003).

The HEC was established under the Higher Education Commission Ordinance 2002. Under its statutory provisions (Section 10), it is tasked with setting up of policy and guidelines for higher education within the country which includes curriculum for higher education in different disciplines (HEC Ordinance 2002, Section 10). HEC has focused on to make available the scientific information to promote research culture in the universities of Pakistan and make them world class centres of education and research (Midrarullah & Shfiullah, 2011). To achieve these objectives HEC in collaboration with UK based International Network for the Availability of Scientific Publications (INASP) Programme for the Enhancement of Research Information (PERI) has developed a National Digital Library Program (Said, 2006).

2.9.1 The Aims and Scope of HEC Digital Library

The HEC aims and scope of the HEC Digital Library are stated as follows:

“This is a programme to provide researchers within public and private universities in Pakistan and non-profitable research development organizations with access to international scholarly literature based on electronic (online) delivery, providing access to high quality, peer reviewed journals, databases and articles across the whole range of discipline (HEC, 2007).”

After its inception in 2004, initially eight databases were subscribed which were mainly related to the field of science and technology. Other resources included subject and multidisciplinary databases related to social sciences and humanities (Bhatii, Chohan, Asghar, 2014, Khan, 2013).

2.9.2 HEC Digital Library's Collection

HEC National Digital Library provides access to international scholarly literature i.e. high quality peer-reviewed journals, databases, articles and e-Books across a wide range of disciplines via online electronic delivery system. Around 75,000 centrally subscribed electronic contents have been made available to the public and private sector universities and non-profit organizations through HEC Digital Library (<http://www.digitallibrary.edu.pk/>).

Pakistan Education Research Network (PERN) connects Pakistani universities and research institutes through high speed Internet bandwidth. HEC has also launched the Pakistan Research Repository (PRP) to digitize and make available online every PhD and M.Phil thesis, produced in the universities of Pakistan. HEC also makes the availability of those journal articles which are not available in the National Digital Library through British Library Document Delivery service (Midrarulllah & Shafiullah, 2011). With the launching of ebrary and McGraw Hill collections, HEC Digital Library now provides online access to 50,000 e-books in addition to more than 24,000 e-journals, allowing researchers to access most of the important text and reference books electronically in a variety of subject areas.

Over 220 leading international publishers including McGraw Hill, Cambridge and Oxford University Press, Taylor & Francis, Emerald, Blackwell Synergy, John Wiley and Sons, United Nations University Press, Stanford University Press, Springer Publishing Company, BMJ publishing Group, MIT Press, and Sybex Inc, etc. have been identified for the access to their online collections (HEC, n. d.).

2.10 Impact on the CM of University Libraries in Pakistan

2.10.1 Collection Development

The review of local literature reveals that university libraries in Pakistan are poorly stocked with inadequate collections. However, these issues have been resolved by the HEC Digital library program by providing access to international high quality scholarly literature in the form of e-books, e-journals, and online databases across a wide range of disciplines.

2.10.2 Selection and Acquisition

The university libraries in Pakistan require books and scholarly research publication published locally and abroad. Akhtar (2007) noted that most of the research related materials are not generally available in the local market. For that matter orders are placed through local booksellers. The booksellers do not show interest in the acquisition of one or two copies of books and journals published abroad. Hanif (1981) observed a complete absence of book-selection aids and book reviewing journals as well as the availability of current national bibliography. The traditional selection and acquisition of library materials in the university libraries are time consuming and adversely affect collection development and management. Ameen and Hider (2007a) noted that university libraries in Pakistan hardly get two thirds of the selected books, because by the time materials are selected and orders are placed for acquisition, most of the titles on the approval lists are gone out of stock from the market.

Ever since its inception, Digital Library is striving hard to provide institutions with superior quality peer-reviewed, full-text, academic and research material in the shape of e-journals as well as e-books. Some of them are, Springer Link, Project MUSE, Cambridge Uni. Press, Science Online, Wiley Inter science, IEEE, JSTOR, Ebrary, McGraw-Hill Professional ISI – Web of Science, Science Direct, and Emerald. This reflects that HEC DL has greatly supplemented and complimented quality electronic collection development to

support universities to attain a steady growth in the research output originating from Pakistan (Tamkanat, n.d).

2.10.3 Financial Issues

University libraries in Pakistan are under constant financial pressure. This has been the most serious for university libraries because of the country's economic problems during recent years. The lack of funds has badly affected the quality of the resources, particularly in the procurement of reference and serial literature from abroad (Akhtar, 2007). HEC subscribed resources are made available free of cost to the universities and institutes of higher learning in Pakistan and the cost of resources are born by HEC (Said, 2006).

2.10.4 Digital Collections of Pakistan Research Repository (PRR)

University libraries around the world have initiated digitization projects to convert their knowledge from analogue formats into digital ones and offering access through electronic means (Rafiq and Ameen, 2013). In line with global initiative to promote open access to scientific literature, and to share the research production of universities of Pakistan with the international scientific community, the HEC has launched the Pakistan Research Repository (PRR) (HEC Views and News (July), 2006). This initiative has been taken to digitize and make available online every PhD theses in the first phase and MPhil theses in the second phase, produced in the university of Pakistan. The repository is to preserve and to make freely available online all the researchers conducted in the universities of Pakistan. Presently PRR contains 1800 PhD theses available in high quality digitised format (HEC Vies and News (Feb), 2006).

2.10.5 HEC Scholars Publication (HSP)

To provide full text access to publications authored by HEC scholars, HEC has initiated HEC scholar Publication (HSP) project. This step would promote the research output of HEC scholar at international level (Midrarullah & Safiullah, 2011).

2.10.6 Directory of Open Access Online Resources

HEC has compiled a directory of open sources. This directory gives convenience to researchers and provide them their required information with much economy of time (HEC Views and News (Dec), 2006).

2.10.7 Secure Electronic Delivery (SED)

If a researcher finds that the required document is not available in HEC Digital Library, then the same is made available via British Library Document Delivery Service (BLDDS) which is world's largest agency, devoted to the provision of remote document delivery. The holdings of BLDDS are very vast covering almost every subject including science, technology, medicine and humanities, in many languages. It holds journals, books, conference proceedings, reports, patents, theses, official publications, music scores and images. BLDDS provide the required information from databases of over 20,000 key research journals The cost of document and delivery charges is born by HEC and the required document is provided to the researcher free of cost (HEC Vies and News (Feb), 2007).

2.10.8 Anti-Plagiarism Services for Paper and Theses checking

To ensure ethical issues in the process of research, HEC has purchased and provided anti plagiarism software (turnitin). This software has been provided to the quality enhancement cells of all the universities of Pakistan. Faculty members, LIS professionals and research scholars are provided this software via user name and password (HEC Views and News (Oct), 2007). This software is an effective tool to avoid the violation of Intellectual Property Rights (IPR) at national and international level. This also validates and authenticates the value and credibility of research in Pakistan.

2.10.9 Open access Online Portal for Pakistani Journals

HEC is planning to develop an online portal of all research journals related to any discipline, published in the universities of Pakistan to provide free full text access to the contents of these journals (HEC Views and News (May), 2007).

2.10.10 Electronic Library Information Navigator (ELIN@system)

The HEC and INASP, the main partner in the HEC DL program have linked up with Lund University of Libraries of Sweden, with their existing Electronic Library Information Navigator (ELIN@system). Through ELIN, the HEC manages the electronic contents by making them efficiently searchable across a wide variety of resources and thousands of titles, which are available through different packages in single interface. This extension in the program was made to enrich the present resources and facilitate researchers in Pakistan (HEC Views and News (DEC), 2006).

2.10.11 Procurement of Library Management Software

HEC is also working on a project to select integrated library software of international standard for the computerization of library materials and services in the universities and institutes of higher learning in Pakistan. According to Midrarullah and Safiullah (2011) it will be helpful for cooperation among the university libraries of Pakistan. It would also be helpful to promote library collections at national and international level.

2.10.12 Copy Right and Related Issues

Complying with copyright, licensing and related issues like plagiarism has been a major challenge for digital libraries. Intellectual Property Rights (IPR) has created an alarming situation for LIS professionals and researchers in Pakistan as noticed by Warraich and Tahira (2009). However, this issue has been solved by the HEC Digital Library program. HEC Digital Library centrally subscribes the online literature of international publishing houses for Pakistani institutes and organization. So far after the

establishment of HEC DL no violation of intellectual property rights has been reported nationally or internationally.

2.10.13 Collaborative Programme

HEC Digital Library has provided an opportunity for the university libraries to establish a collaborative program for the mutual benefit of users' community at regional and national level. HEC Digital Library has made collaboration and sharing of resources among the university libraries of Pakistan more feasible and achievable.

2.10.14 The Nutshell

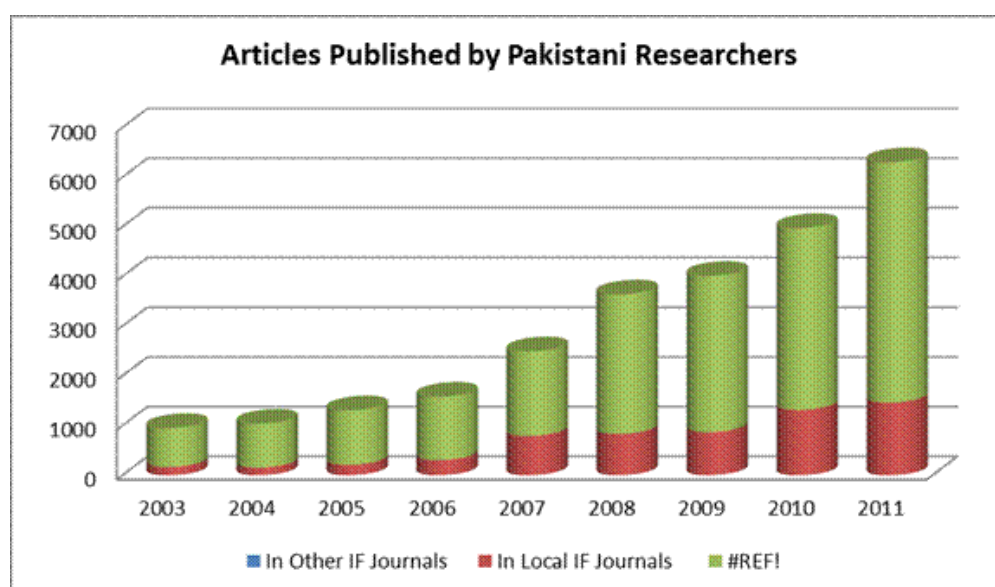
The role of HEC Digital Library in supporting education and research innovation have been acknowledged by the students, researchers and faculty members of the universities and institutions of higher learning in Pakistan (Khan & Ahmed, 2013). The annual report of HEC, 2012 shows that due to HEC Digital Library, research productivity in the universities of Pakistan has increased. This report further presents the research data of universities of Pakistan and states that 6200 research articles were produced in 2011 which reflects a positive impact of HEC DL on the research productivity of Pakistani universities (Graph 1).

Peggy Johnson states that “collection development and management are the meat and potatoes of libraries”. She further narrates that “if you do not have a collection, you do not have a library” (2009). Every academic library that aims to satisfy the information needs of faculty and students must take great care with the development and management of its collection. The review of literature shows that the main objectives of collection development and management is to create a repository of collection both print and electronic according to the information needs of client population to stimulate research and achieve academic goals. Collection development and management and research are directly proportionate to each other. This means that effective collection development and

management puts a good impact on effective research production. Furthermore, collection development and management aims to build a collection of information materials of high quality, authentic, and provide easy access to world class scholarly and intellectual information (Khan, 2013).

In Pakistan, HEC DL has provided an opportunity to the universities and institutes of higher learning to have access to high quality peer reviewed journals, databases and articles across the whole range of discipline (HEC, 2007).

Local literature reveals that studies are being conducted on the use and effectiveness of HEC Digital Library focusing on different user group such as students, teachers/faculty, and public library users (Bhatti, Choahan & Asghar, 2014; Khan and Ahmed, 2013; Khan, 2013; Hussain & Mahmood, 2012; Rafiq & Ameen, 2012; Safiullah & Midrarullah, 2011; Ameen & Rafiq, 2009; Arif & Kanwal, 2009; Malik & Mahmood, 2009; Warrich and Ameen, 2008; Hussain, Mahmood & Shafique, 2008; Tahir, Mahmood & Shafique, 2008 and Said, 2006). These studies have concluded that the users are satisfied with resources of HEC DL in meeting their information needs effectively.



Source: <http://www.digitallibrary.edu.pk/>

Figure 2.5: Research Production in Pakistan after the establishment of HEC DL

In the past years research scholars had no access to resources for their research (Khan, 2013) but this gap has been successfully bridged up by the HEC Digital Library program. Jan and Sheikh (2011) found that HEC Digital Library has a positive role in the provision of desired resources to the users' community in Pakistan. Khan (2011) noted that HEC Digital Library resources have accelerated the pace of research in the universities of KPK. The establishment of Digital Library is an outstanding effort by HEC and its success has been remarkable in the region (Rahman, January, 11, 2013).

Digital libraries are crucial for disseminating knowledge and information. The greatly reduced buying power of Pakistani rupee, dwindling materials budget, lack of selection tools, problems in the selection and acquisition of local and foreign materials, absence of collection development policies and slandered procedures, the need for resources sharing programs, and the importance of other important CM tools, has made HEC Digital Library indispensable for academic development in Pakistan. HEC has allocated a significant amount of funds to the Digital Library program. The program has bridged up the knowledge gap that existed between Pakistan and the developed countries. This is why research output has increased significantly (Graph 1). Bhatti, Chohan & Asghar, (2014) concluded that HEC Digital Library resources have placed a radical impact on the changing higher education environment of Pakistan.

2.11 Summary of the Chapter

Collection management in the university libraries is a complex and important function which provides an infrastructure for collection development and a base for other expanded suite of decisions. It is the most important programme of any university library, driven by goals and objectives of the institutions. The aim of CM is to create a repository or gateway to information for scholars and to capture the intellectual heritage in order to

benefit future learners and thinkers. It is an activity to provide the library with information resources in order to meet the appropriate current and future needs of the client population.

Current shifts in the field of librarianship and information technology has made CM more apparent in the university libraries of Pakistan. Rapid developments in ICT have transformed traditional form of university libraries and their collections, services, users' expectation and staff responsibilities. The HEC is committed to expand the higher education sector in Pakistan which too has greatly influenced the evolution of CM in the university libraries of the country.

At the time of Pakistan's birth, there were only two universities i.e. University of the Punjab and Sindh University, Hyderabad. Presently there are 158 chartered universities in the country both in public and private sector which are financed by the federal government through HEC. Various formulas for allocating funds to university libraries have been recommended in Pakistan, but no single recommendation has received attention from the authorities concerned. Weak and unstable financial position of the university libraries of Pakistan is badly affecting collection development and management activities.

Presently, there are 9 public and 4 private sector universities and institution which impart LIS education and provide human resources to run the affairs of different libraries in Pakistan. University libraries are mainly administered by LIS professionals in their various cadres i.e. chief librarian, additional librarian, deputy librarian and even assistant librarians. Authority regarding financial grants, administrative, and policy decision in relation to the running of the library system lies in the hierarchy of syndicate, academic council, and library committees.

Various factors affect CM activities in the university libraries of Pakistan. These include dwindling budgets, absence of standards, absence of CDPs, lack of assessments of users and collection, insufficient coordination between Faculty and LIS professionals, fast

growth of electronic resources, application of ICTs, inactive role of library association in the formulation of standards, absence of consortial plans and alternative plans are the most common to mention. The review of local literature shows that university libraries in Pakistan develop their collection in isolation, mostly comprising books and journals. To support instruction and research 90 % of books and other reading materials are imported from abroad mostly from America and United Kingdom. Moreover, the nature of acquisition of library materials is collection-centred instead of users-centred. Teaching faculty play a major role in the selection of library materials for purchase while LIS professionals' role are merely of facilitators, providing them catalogues, booklists or books on approval. However, neither faculty nor LIS professionals have a balanced role in the selection process which affect the in time supply of materials and acquisition process. Subscriptions to online resources provide only access rather than ownership. Libraries face problems when subscription is over. However, this issue has been controlled by HEC Digital Library program since 2004 onwards. The electronic resources of HEC Digital Library are made available free of cost to the universities and institutes of higher learning in Pakistan which help them to access required information resources without any subscription.

The review of local literature indicates that the number of studies on CM is small covering mostly acquisition, selection, collection development, resource sharing, and collection sharing etc. A single PhD study was conducted in 2004 by Kanwal Ameen, who made an appraisal of the status of CM in the university libraries of Pakistan. This study included 30 university libraries from all over Pakistan. Out of these 30 universities, only 4 university libraries were included from KPK which means 16% participation. At the present there are 17 public and 9 private sector universities, chartered by the Government of KPK and recognized by HEC. The number of these universities has increased with the establishment of 4 more universities in the province. Keeping in view the above figures to

fore, the CM activities of four universities of KPK was investigated in 2004. The status of university libraries in 2004 and a decade after, 2014 in KPK would be definably different.

Review of the above literature provided a gap and the need to investigate the policies and procedures of CM and users satisfaction from these policies specifically focusing at the provincial level to provide policy guidelines for LIS professionals, higher education departments of KPK, HEC, university administrations, library associations and users.

Chapter 3

Research Methodology

3.1 Introduction

This chapter describes the research method used to achieve the objectives of the current study. The procedure adopted for literature review, selection of population and sample for questionnaire survey and personal interviews. It also explains the construction of the instruments used for data collection, procedure of the data collection and analysis of data.

3.2 Research Methods

It is necessary for researchers to determine the basic purpose of the research study and the research approach prior to carrying out the practical work. Within the limited time and resources, the prior consideration of research objectives and methods save researchers' time, give them confidence about data accuracy, and guide them to better utilize the limited resources and time (Neuman, 2000). The main objectives of the study were;

1. To investigate collection management (CM) policies as well as procedures adopted by the university libraries of Khyber Pakhtunkhwa (KPK), Pakistan.
2. To study the impact of ICT, electronic resources and HEC Digital Library on CM in the university libraries of KPK.
3. To explore issues and challenges of CM in the university libraries of KPK.
4. To study the level of users' satisfaction from CM policies and procedures adhere to by the university libraries of KPK.
5. To recommend practicable guidelines for CM in the university libraries of KPK.

Keeping in view the objectives of the study, the survey research method was adopted for data collection from the target population dispersed throughout the province of KPK. According to Connaway and Powell and (2010) survey research method is usually used to

obtain contemporary data from a large number of cases, including that are geographically dispersed. Also, survey research is generally considered to be more appropriate for studying personal factors and for exploratory analysis of relationships. Powell and Connaway (2004) also noted that this technique can be effectively used to: (1) describe characteristics of the population, (2) estimate proportions in the population, (3) make specific predictions, and (4) test associational relationships. Although the survey research method has some problems of reliability and validity, but despite the fact, due to lack of research facilities in developing countries, this has been the most popular method of research in social sciences.

This study was conducted in three phases. In the first phase a comprehensive literature review was conducted by using standard information sources (Emerald Insight, JASTORE, Ebsco Library, Information Science and Technology Abstract (LISTA), Science Direct, Local (PLA) and International ALA and ACRL Association's publications and conference proceedings and latest editions of Johnson's (2014, 2009) and Evans and Saponaro's (2012, 2005) books on the subject of collection development and management etc.) and other relevant works for the better understanding of technical aspects of the study, broadening the conceptual breadth about various aspects of the phenomenon under study and developing a conceptual framework. In this phase widespread efforts were made to identify the relevant literature and study opinions of the local and international experts on the various aspects of the study.

In the second phase, on the basis of the findings of literature review survey instruments (structured questionnaires and semi structured interview guides) were developed and pre-tested to identify problems which respondents might encounter in understanding questions of data collection instruments and to ensure their validity and reliability. In the third and final phase quantitative and qualitative data were collected with the help of survey instruments. The collected data were then quantitatively and qualitatively

analyzed to research at conclusions. Figure 3.1 presents a flow chart of research methodology used in this study.

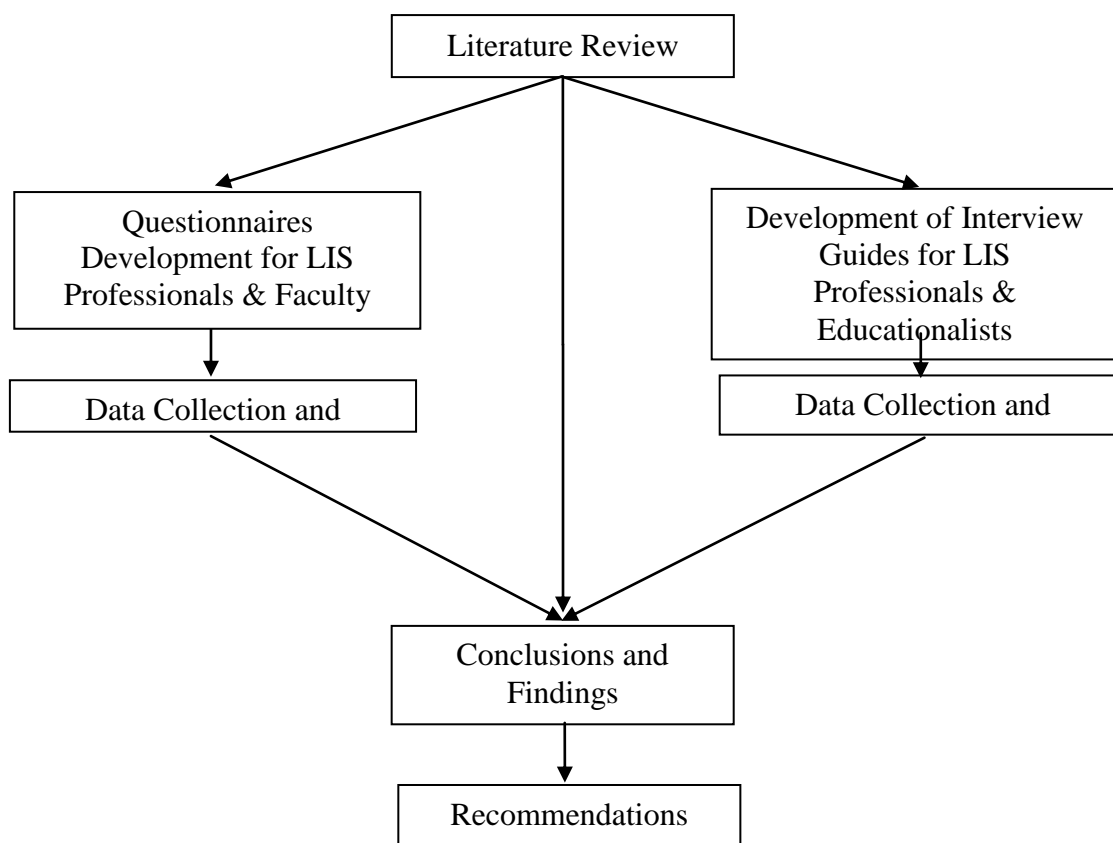


Figure 3.1: Research Methodology for the Current Study

3.3 Data Collection and Analysis about CM in the University Libraries of KPK

This section explains the procedure used for literature search, instruments development, data collection, and analysis.

3.3.1 Literature Review

To understand different theoretical and practical aspect of the study, an extensive literature search was conducted. For this purpose different aspect of CM such as: information needs assessment; collection development policies; selection and acquisition procedures, fiscal management; evaluation of collection including de-selection (weeding), cooperative collection development, and legal issues in CM etc. were reviewed in detail. Literature related to the influential factors affecting CM activities in the academic libraries

was thoroughly studied. Efforts were made to identify literature on various aspects of the problem representing developed and developing countries like Pakistan. For literature search standard sources were used, such as library literature, books, journals, Library and Information Science Abstracts (LISA), theses, dissertations, online resources, i.e. Ebsco Host, Science Direct, Emerald Insight, etc. apart from it, World Wide Web (www) search engines such as Google, Google scholar, yahoo were also extensively used. The researcher personally visited different libraries at Lahore, Bahawalpur, and Peshawar for literature search. Some of the important and latest literature which was not available in Pakistan was acquired from countries like United States of America and Canada. Professional colleagues and friends working in these countries helped researcher in the provision of the relevant and up to date literature. A list of references and bibliography consulted during the literature search is given at the end.

3.3.2 The Research Approach

After setting the aims and objectives of the study, an appropriate research approach is required to carry out the research study. According to Bryman (2004) appropriate research approach describes how problems should be studied, what questions should be asked, how to enquire and what rules should be followed in construing the answers obtained. Although a range of research approaches are available to conduct a research study. However, majority of the researchers (Bryman, 2012, Babbie, 2010, Bryman, 2004) prefer two research approaches in social sciences “qualitative approach and quantitative approach”. These are the most frequently used approaches in social sciences.

In this study a mix method approach was used for data collection about the CMin the university libraries of KPK. In mix method a researcher combines elements of quantitative and qualitative approaches for data collection in a single investigation. Several authors (Creswell, 2013; Creswell, 2007; Teddlie & Tashakkori, 2009; Creswell & Clark, 2007;

Green, 2007; Bergmann, 2011; Teddlie & Tashakkori, 2003) advocate the use of mix methods for the purpose of breadth and depth of understanding the situation and corroboration.

Three types of mix methods research design are common:

- (a) The QUAL-quan Model: in this model qualitative data are collected first and are more heavily weighted than quantitative data.
- (b) The QUAN-qual Model; in this model quantitative data are collected first and are more heavily weighted than qualitative data.
- (c) The QUAN-QUAL Model: in this model, quantitative and qualitative data are simultaneously collected and are equally weighted (Gay, Mills and Airasian, 2009).

3.3.3 The QUAN-qual Model

The QUAN-qual Model of mixed method was adopted in this study. Questionnaire was used as a major survey tool for quantitative data collection, while semi-structured interviews were conducted to cover the gaps of quantitative data. In the first phase, the researcher formulated the research questions on the basis of the reviewed literature, developed survey tool and collected quantitative data, analyzed and interpreted the data. The qualitative data was collected through personal interviews from the target population. The use of QUAN-qual Model let the researcher to present the quantitative data (chapter 4) before the qualitative data in the same chapter. The detail description of research methods employed is provided as under:

3.4 The Construction of Survey Tools (Questionnaires)

Self-completion questionnaires were used to collect the quantitative data and to know the opinions through open ended questions from the target population (library professionals and faculty members) throughout the universities of the province of KPK. Probably no other data collection tool is used more frequently in social science research than

the questionnaire. Many researchers have declared it as the most suitable and widely used method of getting scientific information from a large number of respondents who may be geographically dispersed. Black and Champion (1976) stated that many means of data collection are employed to elicit information from the targets of social inquiry but the questionnaire, used alone or in conjunction with other data collection methods is considered the most popular one. Connaway and Powell and (2010) and Gay, Mills and Airasian, (2010) in their texts have discussed its advantages including its short comings such as low response rate and questions of validity, however they still believe that questionnaires are relatively inexpensive to administer and facilitate the collection of large amount of data in short period of time.

The questionnaires were designed following the literature review. As a basis for collecting specific information about CM activities the researcher started with a list of components published by Johnson (2014, 2009) in her text “Fundamentals of Collection Development and Management”. Apart from it, the works of Evans and Saponaro (2012, 2005, & 2004) “Developing Library and Information Center Collections” and “Collection Management Basics” 4th, 5th and 6th editions were also consulted for this purpose. Furthermore, the work “Collection Development and Management for 21st Century Library Collection” published by Gregory (2011) and different relevant online research articles were also consulted for this purpose. The researcher included additional components in the survey tool to get a better understanding of how electronic resources, consortial participation, ICT and HEC Digital Library have been incorporated in the policies and procedures of CM in the university libraries of KPK.

3.4.1 The Validation of Survey Tools

To ensure the validity of the questionnaire, two groups of the experts were selected i.e. local experts and international experts. The construction and validation of survey tools

were completed in two phases. The rationale for selecting local experts was to find out the applicability of the survey tools according to the local environment. For that matter, consultations were held with library professionals and library educationalists from the Islamia University of Bahawalpur, The University of the Punjab, University of Sindh, Jamshoro, University of Peshawar and University of Sargodha respectively. A meeting was held with the professor, Department of Library and Information Science, University of the Punjab, Lahore on 25th July, 2013. Due to geographical limitations and busy schedule, telephonic conversations were held with the ex-chairperson and professor, Department of Library, Information Science and Archive Studies, and Pro-Vice Chancellor, University of Sindh, Jamshoro, who sent valuable suggestions via surface mail. Library professionals and educationalists from the Islamia University of Bahawalpur and University of Peshawar also gave their valuable comments and opinions during researcher's frequent visits to these universities. One expert from the University of Sargodha gave opinion via email and mentioned suggestions in the instruments in electronic format.

All the experts were sent drafts of the instruments via surface mail and email for study, suggestions and their expert opinions. Library professionals and educationalists in the country, suggested and shared useful information based on their professional and academic experiences, which not only helped the researcher to understand the current practice of CM in the university libraries of Pakistan but also helped to further refine data collection instruments and incorporate more useful information in their structure.

In the second phase, the designed survey tools were sent to the experts of the developed countries like Canada and United Kingdom. The rationale for sending the survey tools to the foreign experts was twofold, firstly, to understand the practice of CM in the university libraries of the countries with advanced education and librarianship system and secondly to ensure the content validity of the survey instruments.

3.4.2 The Pilot Study

A pilot study was conducted to ensure the effectiveness and reliability of the questionnaires designed for the study. Printed copies of the questionnaires were distributed in 10 universities by taking 5, each from public and private sectors within Peshawar, Mardan, Swabi and Nowshera districts. All the respondents suggested some minor changes. Necessary changes were incorporated in the survey tools in the light of the feedback before administering it to the target population.

The internal consistency of the instruments was also checked with the help of SPSS - 19 by using Cronbach's alpha value. Cronbach's alpha is the coefficient of internal consistency. It is commonly used as an estimate of the reliability of an instrument. The value of Cronbach's alpha generally increases as the inter-correlations among test items increase, and is thus known as an internal consistency estimate of reliability of test scores (Cronbach, 1951). Cronbach's alpha is the most common measure of reliability in quantitative research. A widely accepted rule of thumb is that alpha should be at least 0.70 for a scale to demonstrate internal consistency (Spector, 1992). Similarly, an error margin of 0.05 (5%) with 95% confidence level being generally acceptable in social sciences was used in this study. Values of Cronbach alpha in table 3.1 and 3.2 show that most of them are well above the accepted minimum level of 0.70 which confirm the internal consistency of the instruments of the study.

Table 3.1

Internal Reliability of Items in the Various Sections of Questionnaire for LIS Professionals

S. No.	Section of the instrument	Cronbach's Alpha
1.	Assessing users' needs	.713
2.	Collection development policy	.853
3.	Selection procedures	.719

4.	Acquisition procedures	.804
5.	Gifts and donations	.969
6.	Bibliographic access and physical preparation	.960
7.	Promotion of library collection to the users	.582
8.	Evaluation of the collection	.701
9.	Weeding the library collection	.906
10.	Preservation and conservation of collection	.602
11.	Impact of ICT on CM	.931
12.	Impact of HEC digital library on CM	.877
13.	Problems associated with HEC digital library	.910

Table 3.2

Internal Reliability of Items in the Various Sections of Questionnaire for Faculty Members

S. No.	Section of the instrument	Cronbach's Alpha
1.	Assessing users' needs	.852
2.	Collection development policies and procedures	.909
3.	Organization of library collection	.891
4.	Promotion of library collection to the users	.914
5.	ICT and access to HEC digital library	.834

3.4.3 Major Sections of the Questionnaires

3.4.3.1 Major Sections of the Questionnaire Designed for LIS Professionals to Examine the Policies and Procedures of CM

Following are the major sections of the survey questionnaire, designed for LIS professionals:

Section 1: Demographics profile of the university libraries of KPK i.e. name of library, institute, and year of establishment, type of university and library system, disciplines covered, users' community, information about library collection, staff, and responsibility of collection management.

Section 2: Assessing users' needs i.e. methods and purposes of users' needs assessment

Section 3: Collection development policy i.e. information about CDPs and goals of collection development policies and procedures.

Section 4: Selection procedure i.e. selection procedure of collection, selection staff, language and format of materials, selection tools and evaluation process of materials during selection.

Section 5: Acquisitions of materials i.e. mode of acquisition, acquisition of local and foreign materials, final decision making authority and major difficulties faced during the process of acquisition.

Section 6: Information about gifts and donations of books and other materials.

Section 7: Budgeting and fiscal management i.e. total budget allocation on annual basis for various items, regularity of budget, required increase in the existing allocation, and information about library securities.

Section 8: Bibliographic access and physical preparation of collection.

Section 9: Marketing of library resources to the user community.

Section 10: Evaluation of the collections, both print and electronic

Section 11: Weeding of library materials i.e. information about weeding policy, purpose of weeding, type and determination of materials to be weeded out, and issues faced in the process of weeding.

Section 12: Cooperative collection development and resources sharing

Section 13: Preservation and conservation of collection i.e. storage, preservation and replacement strategies and type of security measures taken for library collection.

Section 14: Impact of ICT and electronic resources on CM

Section 15: Impact of HEC Digital Library on CM.

3.4.3.2 Major Sections of the Questionnaire Designed for Faculty Members to Measure their Level of Satisfaction

Following are the major sections of the survey questionnaire, designed for faculty members to measure their level of satisfaction with the policies and procedures of CM in the university libraries of KPK.

Section 1: General Information and Respondents' Demographics i.e. type of university (public or private), respondents' gender, and designation, age group and library usage experience.

Section 2: Assessing Users' needs i.e. level of satisfaction of faculty members with the employed methods of users' needs assessment and their proposed suggestions to improve the current methods and for effective CM strategies and procedures.

Section 3: Collection Development i.e. effectiveness of collection development policies, procedures and library collections and proposed suggestions for improving the quality and utility of current collections of the respective university libraries.

Section 4: Organization of Library Collection i.e. satisfaction with the organization and library materials' accessibility. An effort was also made to find out the most common problems which are faced by the teaching faculty while searching a piece of information (books, journals etc.) in their respective university libraries.

Section 5: Promotion of the Library Collection: Questions regarding the effectiveness of promotion strategies adopted for the marketing of library collection were asked in section five. In this section it was also inquired from faculty members to mention

their preferred methods to be adopted by the LIS professionals for effective collection promotion in their respective university libraries.

Section 6: Applications of ICT and Access to HEC Digital Library: In section six, faculty members' satisfaction with the applications and availability of ICT facilities and access to HEC Digital Library was inquired. In this section suggestion for improving the ICT facilities and access to HEC Digital Library was also inquired from the faculty members with the purpose to improve access to electronic and digital resources in the university libraries of KPK.

3.4.4 Type of Variables of the Study

The variables used in this study are categorical in nature. Categorical are those variables which can take on one of a limited, and usually fixed, number of possible values and record a response as a set of categories. The researcher preferred these types of variables to obtain maximum and relevant information through a lengthy questionnaire and to assist the respondents in their choice of selection by giving them multiple options.

3.5 Sampling Frame and Target Population for Questionnaires Administration

The population of this study was the chief/senior librarians working in the central libraries and faculty members of the main campuses of all the public and private sector universities of KPK. Data about the first three objectives of the study were collected from LIS professionals. Moreover, faculty members with a minimum of three years library usage experience, knowledge of HEC Digital Library, ICT applications and library activities were purposively selected from the public and private sector universities of the province with the aim to measure the effectiveness of the policies and procedures of CM in the university libraries (fourth objective).

Since, the total population of faculty members, working in different departments/institutes of all the public and private sector universities of the province was

very large and it was not practical to survey the entire population and conduct in-depth research. Therefore, a reasonable and manageable purposive sample of 260 library users (faculty members), including 10 users each from the 26 universities was selected with the help of library professionals fulfilling the offer mentioned criteria.

The official list of HEC recognized universities and degree awarding institutions available on (<http://www.hec.gov.pk/OurInstitutes/Pages/Default.aspx>) was used as a sampling frame for this purpose. The universities which were established in KPK, both in public and private sectors duly recognized by the HEC till 31st December, 2012 were included in the survey, with the purpose to accommodate maximum number of universities in the study.

According to the official statistic of HEC there are 17 public and 9 private sector universities in KPK. Table 3.3 illustrates the sector wise distribution of universities in the province of KPK.

Table 3.3

Total No of Universities in KPK both in Public and Private Sectors

S.No	Type of University	No of Universities
1	Public Sector	17
2	Private Sector	9
Total		26

3.6 The Survey Administration

The printed copies of questionnaires along with covering letters (Appendix B&C) were sent to the central libraries and respective departments/institutes of the universities by registered post along with self-addressed envelopes with postal stamps to facilitate the response rate. Some questionnaires were sent through e-mail and personal visits. Professional colleagues, administrative staff members and teaching faculty working in the

universities helped in data collection from their respective universities. The data collection process was completed in five months. Many follow up letters, emails, telephonic calls and personal visits made the achievement of good response rate possible. Frequency distribution of the response rate is presented in table 3.4 and 3.5 respectively.

Table 3.4

Frequency Distribution of the Response Rate (LIS Professionals)

S.No	Universities	Targeted response	Obtained response	Percentage
1	Public Sector	17	17	100
2	Private Sector	9	9	100
	Total	26	26	100

Table 3.5

Frequency Distribution of the Response Rate (Faculty Members)

S.No	Universities	Targeted response	Obtained response	Percentage
1	Public Sector	170	127	75
2	Private Sector	90	63	70
	Cumulative Response	260	200	77%

3.7 Analysis and Interpretation of Quantitative Data

The quantitative data were coded and analyzed with the help of IBM Statistical Package for Social Sciences (SPSS version 19). Both descriptive and inferential statistics (chi square) were used for data analysis. The choice of descriptive statistic such as frequencies and percentages was made with the purpose to summarize the bulk of data and to determine respondents' trends and preferences. Inferential statistics allowed the researcher to conclude and draw inferences on the basis of data analysis.

3.8 The Interviews

In survey research, the search for new information is by no means limited to the use of questionnaires. As the purpose of survey is to acquire current – rather than historical information about factors such as experiences and opinions of people, the interview therefore, also serves as useful survey tool (Busha & Harter, 1980). Interview is a purposeful oral, in-person interaction between a researcher and an individual respondent for eliciting information about an issue in question. It is one of the most effective methods, for collecting accurate, relevant, and up to date information, and successfully digging out comprehensive information and data, from the minds of the people. (Black & Champion, 1976; Gay, Mills & Airasian, 2010).

Interviews may be formal and planned or informal and unplanned. Some interviews are structured where the questions and answer categories are predetermined. Unstructured interviews are referred to in-depth or intensive interviews. In this type of interview neither the exact wording of question nor the answers are predetermined (Gorman & Clayton, 2005). Semi structured interviews combine both structured and unstructured approaches (Gay, Mills & Airasian, 2009). This approach was adopted because it allows the researcher to receive an immediate response to a question; helps both the interviewer and the interviewee to explore the meaning of questions posed and answers proffered, enables the researcher to explore causation, and facilitates the collection of a large quantity of rich data in relatively short space of time (Gorman & Clayton, 2005).

In the first phase the researcher, based on the literature review formulated research questions, developed questionnaires, collected quantitative data and then interpreted. Semi-structured in depth interviews were conducted to collect qualitative data. The quantitative data helped researcher to identify the potential respondents which included chief/senior librarians, senior faculty members, preferably members of the library committees and senior

faculty members of all the LIS departments, established and working in the public and private sector universities of KPK.

The rationale for using the interview technique was to supplement and complement the data obtained through questionnaires and to obtain contemporary and deeper information and opinions regarding various issues and challenges of CM in the university libraries of the province.

Keeping in view the objectives and research questions of the study, topics were identified in advance. Pilot study was also conducted to assess the reliability of the interview guides. Five senior LIS professionals from Peshawar city were interviewed to check the reliability of the interview instrument.

3.8.1 Sampling Procedures for Interviews

The population for the interviews comprised of chief/senior library professionals, senior faculty members of the library committees and senior LIS faculty members/chairmen/chairpersons. Sampling for the interview technique was purposive in nature. Purposive sampling is a kind of nonprobability sampling technique in which the units to be observed are selected on the basis of the researcher's judgment about which ones will be the most useful or representative (Babbie, 2012). The rationale behind using this type of sampling technique was to select appropriate, reliable and knowledgeable informants to serve the objectives of the study.

3.8.2 The Administration of Interview Procedure

The qualitative data was collected in three phases. The population for interview was divided into three groups.

Group 1: Chief/senior LIS professionals

Group 2: Senior faculty members

Group 3: Senior LIS faculty members/chairman/chairpersons

In the first phase LIS professionals were interviewed. The interviewees were sent interview schedule through surface mail/email and personal visits. The researcher also contacted them for consent/time via phone before going for the interview. Out of 26 respondents, one LIS professionals decline to give time for the interview because of busy schedule. All the interviews were conducted in the office places.

In the second phase the next group i.e. members of the library committees were planned to be interviewed. This group constituted the limitation of this study. The reason was that most of the universities had no library committees. During the process of quantitative data collection some respondents mentioned the presence of library committees in their universities, comprising senior faculty members. Professional colleagues in those universities were requested to provide their particulars. The identified faculty members were approached for interviews, however when the researcher explained them the objectives of the study, it was observed that they were basically subject experts and books selectors and had neither a role nor knew about the CM activities of their libraries. Though, they had an upper hand and dominating position in the process of selection of materials but the CM activities were the responsibility of library staff. Therefore, no information related to the objectives of the study could be elicited in this phase.

In the third phase senior faculty members of the departments of LIS were interviewed. The population of this group included all former and working heads and chairpersons of those LIS departments which are working in the public and private sector universities of KPK. This was done with the purpose to get their perceptions regarding the current status of policies and procedures of collection management, issues and challenges of collection development polices, role of librarians and faculty collaboration on the CM of university libraries, impact of budget cuts on the university libraries and the need of alternative strategies, the role of ICT and HEC Digital Library and the needed competences

of library staff to handle the current and evolving nature of CM in the university libraries based on their past and present professional and academic experiences.

All the interviewees were sent interview schedule through surface mail, electronic mail and personal visits. The visits were made to libraries in Peshawar, D.I. Khan, Swabi, Mardan, Nowshera, Swat, Dir, Malakand, Kohat, Mansehra, Haripur, Charsadda and Bannu. Prior to the visits of researcher to these universities time and availability of the interviewee was confirmed again to avoid any inconvenience. All the interviews were conducted according to the schedule of the meetings. Originally interviews recordings were of 45 minutes to one hour duration. Prior to each interview the researcher spent 30 minutes to one hour for preparatory talks, meeting library staff and a round of the central library after the interview. Face to face interviews were conducted with 25 senior librarians and 4 heads of the LIS departments. The questions were explained to the respondents where required. Follow up questions were asked for clarification and explanation. All the interviews were conducted in native language (Pashto) as this was the most convenient way of expressing and getting the real picture of the situation. Answers were recorded by the research in writing by taking notes during interviews. It was a suitable method to probe the issues of CM in the university libraries of the province. The schedule was supplemented by an audio recorded device. However, it was noted that majority of the respondents had problems and issues with the universities' administration and faculty member over various matters; therefore, they showed their concerns regarding audio tape recorded interview.

After every interview, the recorded comments of the respondents were repeated by the researcher to the respondents. This was done with the purpose to remove ambiguity (if any), attain precision and confirmation of facts obtained during interviews. All respondents were also forwarded the transcripts of their interviews for record and to avoid any controversy in future.

3.8.3 Analysis of Qualitative Data

Data analysis in qualitative research consists of preparing and organizing the data (text data) for analysis, then reducing the data into themes through a process of coding and finally representing the data in figures, tables or a discussion (Creswell, 2007). Across many books on qualitative research, this is the general approach that researchers adopt. This study used the same approach being fairly straightforward and simply. The contents of the recorded interviews were extensively reviewed, organized, analyzed and categorized using a thematic approach (content analysis).

The duration of interviews was between 45 to 60 minutes. After every interview the preparation of verbatim transcript took about 2 to 3 hours depending upon the lengths of interview. It again took 3 to 4 hours to review, organize, analyze and categorize interview text into themes and sub themes keeping to fore the objectives of the study.

The detail of research process carried out in this study is diagrammatically presented in the following figure 3.2.

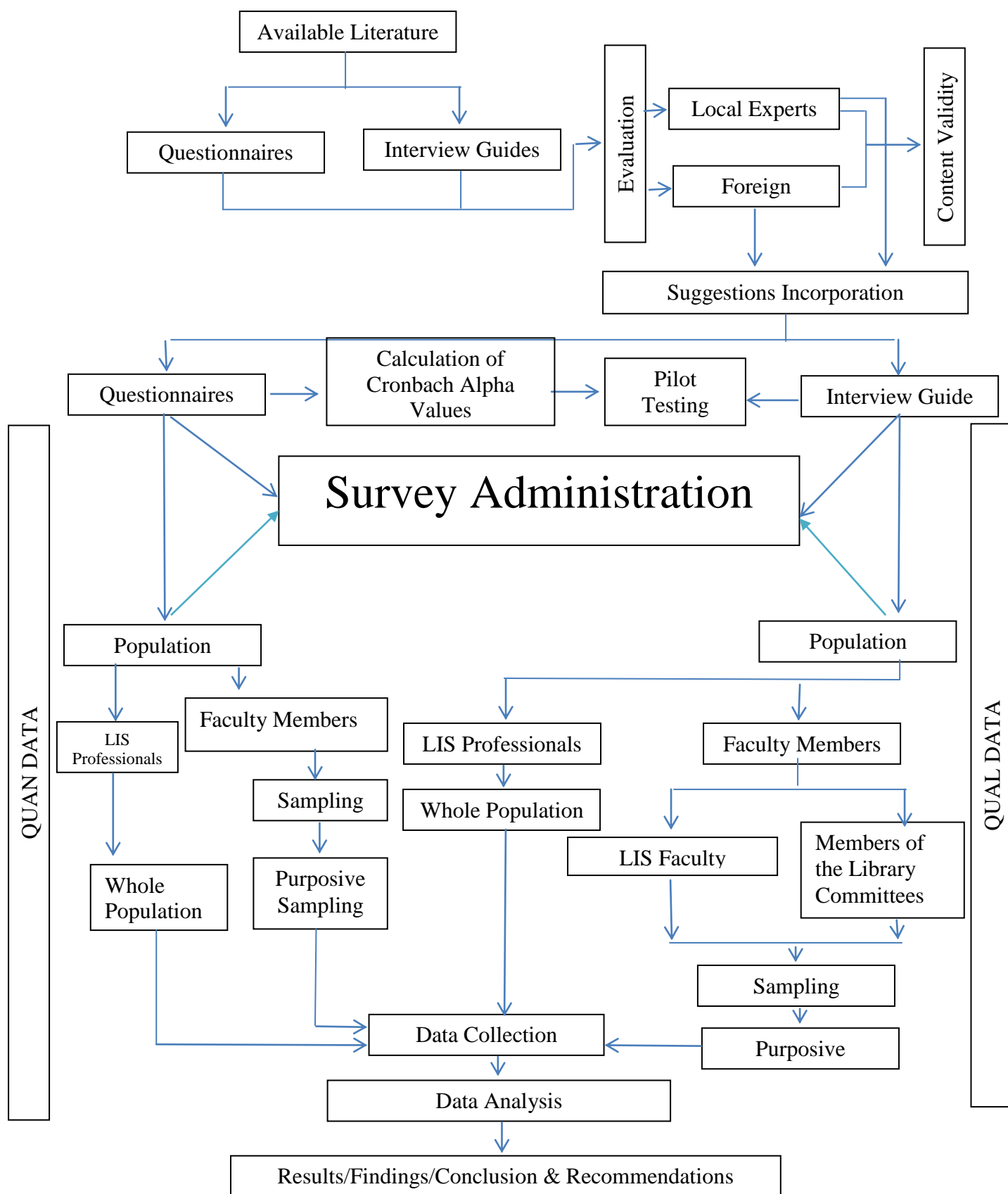


Figure 3.2 Research Methodology Flow Chart of the

3.9 Ethical Consideration

Research ethics were followed in order to protect participants from any harm while ensuring their anonymity and confidentiality of facts. Prior permission was obtained from the concerned authorities of the public and private sector universities of KPK for data collection. This included the aims and objectives of the study and details of information sought from the central libraries of the universities. During the data collection stage, questionnaires and interview schedules were supplemented with covering letters, explaining the objectives of the study to the respondents. They were also assured that the information they provide shall remain strictly confidential and will not be shared or used by anyone other than the researcher for the current study. In case of any query or explanation respondents were provided complete details of researcher i.e. contact number, email and postal address. Respondents were given an open choice to participate in the survey or otherwise. All the respondents were encouraged to participate in the survey, however to ensure volunteer participation, none of them were compelled or influenced.

The permission for recording the contents was sought before the interview. However, to get information in natural way, the use of audio tape was abstained on the requests of the respondents. This was also done with the purpose to save respondents from any negative ramifications from the university administration.

3.10 Style Manual

The researcher followed the style manual of American Psychological Association (APA – 6th edition) for in-text citations, font size, headings, spacing, table, figures, margins and references, as recommended by the Department of Library and Information Science, the Islamia University of Bahawalpur.

Chapter 4

Data Analysis and Interpretation

This chapter contains two sections. The first section presents quantitative analysis and interpretation of data, collected through survey questionnaires from library and information science (LIS) professionals and faculty members. The second section of this chapter presents qualitative analysis and interpretation of data collected through personal interviews from senior LIS professionals and educationalists.

Section I: Analysis and Interpretation of Quantitative Data

Part I: Policies and Procedures CM in the University Libraries of KPK

This section analyzes the data collected through self-completion questionnaires from the central libraries of the universities, both public and private, established till 31st December, 2012 in the province of KPK, Pakistan. The main objectives were to collect data about CM policies as well as procedures adopted by the public and private sector university libraries of KPK and to study the impact of ICT, electronic resources and HEC Digital Library on these policies and procedures. Furthermore, it was also aimed to obtain data about major issues and challenges associated with CM policies, procedures and activities in the university libraries of KPK and to suggest and recommend practicable guidelines for improvement.

The printed copies of questionnaires along with covering letters were sent to the central libraries of the universities by registered post along with self-addressed envelopes with postal stamps. Some questionnaires were sent through e-mail and personal visits. Many follow up letters, emails, telephonic calls and personal visits made the achievement of the ideal response rate (100%). The data was analyzed with the help of SPSS version 19 and are reported here. The respondents of the study were the chief/senior LIS professionals working

in the central libraries of the main campuses of all public and private sector universities of KPK.

The data were collected and analysed on the pattern of the following sections;

Section 1: Demographics profile: In this section miscellaneous information were sought about libraries and parent institutions. Other questions included type of universities and library system, major disciplines covered, users' communities, library collections and staffs, and responsibly of CM.

Section 2: Assessing users' needs: This section contained information about the employed methods and purpose of users' needs assessment in the university libraries of KPK.

Section 3: Collection development policy (CDP): The possession of CDP and goals of collection development and management were inquired in this section.

Section 4: Selection procedure: Section four aimed to obtain data about the selection procedures adopted by the universities libraries for collection development. It also included information about selection staff, language and format of reading materials, selection tools and the evaluation process adopted during the process of selection of library materials.

Section 5: Acquisitions of materials: Information about the mode of acquisition, acquisition of local and foreign materials, and major obstacles encountered during the process of acquisition were asked in this section.

Section 6: Information about gifts and donations of books and other materials were inquired from the target population in section six.

Section 7: Budgeting and fiscal management: Data about the total annual budget allocation for various items, regularity of budget, required increase in the existing budget, and information about library securities were collected in this section.

Section 8: Bibliographic access and physical preparation of collection: Information about bibliographic access to print and electronic materials was inquired in this section.

Section 9: Marketing of library resources to the user community: This section collected information about the various collection promotion strategies adopted by the public and private sector universities of KPK.

Section 10: Data about evaluation of the collection, both print and electronic were collected in this section.

Section 11: Weeding of library materials: Various questions about weeding policy, purpose of weeding, type and determination of materials to be weeded out, and issues faced in the process of weeding were asked in this section.

Section 12: Information about cooperative collection development and resources sharing programs were acquired in section twelve.

Section 13: Preservation and conservation of collection: Data about storage facilities, preservation strategies, and type of security measures taken for libraries and collection and replacement policies were collected in section thirteen.

Section 14 and Section 15: Impact of ICT and HEC Digital Library on CM. Data about the impact of ICT and electronic resources and HEC Digital Library on CM were collected in section fourteen and fifteen respectively.

4.1 Demographic Profile

4.1.1 The Establishment of Universities in KPK

Majority of the respondents provided information about the year of establishment of universities. However, five each from public and private sector did not mention the year of establishment of their universities. This gap was bridged up by getting the relevant information from their respective institutional websites and annual reports.

The data show that University of Peshawar is the oldest public sector university of the province, the first in Pakistan, established after the partition in 1950 and is generally known as “mother of all universities” in the KPK, followed by Gomal University Dera Ismail (DI) Khan, University of Engineering and Technology, Peshawar, and KPK Agricultural University, Peshawar (previously NWFP Agriculture University), established in 1974, 1980 and 1995 respectively.

In private sector, CECOS University of Information Technology & Emerging Sciences, Peshawar is the oldest university which was established in 1986, followed by Gandhara University, Peshawar and Preston University, Kohat, established in 1995 and 1996 respectively.

The data in Table 4.1 and 4.2 illustrate that during the post-independence forty eight years period (1947 to 1995); only four universities were established in the public sector, whereas one university was established in the private sector in KPK. After independence, from 1947 till 1995, the total number of universities in KPK, both in public and private sectors were five. However, the era of 2000 and onwards saw an unprecedented growth of universities in KPK. The number of universities which were 5 in 1995 reached 26 in 2012 with the establishment of 13 universities in public and 8 in the private sectors. This shows that the number of public and private sector universities in KPK grew from 4 to 17 and 1 to 9 respectively (figure 4.1).



Figure 4.1: The growth of universities in KPK from 1947 to 2012

Table 4.1

Public Sector Universities in KPK

S. No	Name of Universities	Year of Establishment
1.	University of Peshawar, Peshawar, Peshawar	1950
2.	Gomal University, D.I. Khan, D.I.Khan	1974
3.	NWFP University of Engineering. & Technology, Peshawar, Peshawar	1980
4.	KPK Agricultural University, Peshawar, Peshawar	1995
5.	University of Malakand, Chakdara, Dir, Malakand	2001
6.	Hazara University, Dodhial, Mansehra, Mansehra	2001
7.	Kohat University of Science and Technology, Kohat, Kohat	2002
8.	University of Science & Technology, Bannu, Bannu	2005
9.	Shaheed Benazir Bhutto Women University, Peshawar, Peshawar	2005

10.	Islamia College University, Peshawar, Peshawar	2008
11.	Khyber Medical University, Peshawar, Peshawar	2009
12.	Abdul Wali Khan University, Mardan, Mardan	2009
13.	Shaheed Benazir Bhutto University, Sheringal, Dir, Dir	2009
14.	University of Swat, Swat, Swat	2011
15.	University of Haripur, Haripur	2012
16.	Bacha Khan University Charsadda, Charsadda	2012
17.	University of Swabi, Swabi	2012

Table 4.2

Private Sector Universities in KPK

S. No	Name of Universities	Year of Establishment
1.	CECOS University of Information Technology & Emerging Sciences, Peshawar	1986
2.	Gandhara University, Peshawar	1995
3.	Preston University, Kohat	1996
4.	City University of Science and Information Technology, Peshawar	2001
5.	Sarhad University of Science and Information Technology, Peshawar	2001
6.	Qurta University of Science and Information Technology, D.I. Khan	2001
7.	Northern University, Nowshera	2002
8.	Abasyn University, Peshawar	2007
9.	Iqra National University, Peshawar	2010

4.1.2 University Library System: Centralized and Decentralized

In a university, library is the heart of academic setup, which supplies and disseminates the elixir of academic life, that is, knowledge to the academic community through centralized and decentralized libraries and helps the universities in the accomplishment of their educational objectives. How this supply and dissemination could be most effective has, however become a baffling problem in Pakistan.

Majority favour services from a centralized collection, while others strongly clamour for facilities from decentralized collections. Since, the library system has a direct bearing on the collection development and management activities of libraries therefore, this question was included in the survey tool. All respondents (N=26) replied to this question.

The data indicate that centralized library system is the most common and preferred one adopted by most of the public 11 (65%) and all private 9 (100%) sector universities of KPK. The system of *central libraries with departmental and seminar libraries* significantly differentiate public sector universities from private because no university in the private sector mentioned this type of system in their libraries. It indicates that there is a complete absence of *centralized library with departmental/seminar libraries systems* in the private sector universities of KPK. It was further noted that this type of system is mostly adopted by the old public sector universities of the province i.e. University of Peshawar, Gomal, Univeristy, DI Khan, University of Engineering and Technology, Peshawar, and KPK Agricultural University, Peshawar.

Decentralization requires more budgets, staff, materials, equipment and creates collection development and management issues in libraries. This could be the reason that no university in the public and private sector has adopted this type of library system. On the other hand, centralization provides an institution with economy, efficient acquisition and management of books and other reading materials in an up-to-date and well stocked library.

Therefore, because of cost benefits and effectiveness this system seems to have been adopted by all the private and majority (65%) of the public sector universities of KPK.

Table 4.3

Frequency Distribution of the Type of Library Systems in the University Libraries of KPK
(N=26)

S.No	Type of Library System	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Centralized (Central library)	11	65	9	100	20	77
2.	Decentralized (Departmental libraries)	0	0	0	0	0	0
3.	Central library with departmental/seminar libraries	6	35	0	0	6	23
Total		17	100	9	100	26	100

4.1.3 Collection Development in Major Disciplines

This question was added with the purpose to find out major disciplines in which university libraries of the province develop their collections. The following Table (4.4) illustrates that major areas of collection development in most of the universities (21, 81%) are Social (Public=15, 88% and Private = 6, 67%), Management and Information Sciences (Public =14, 82% and Private = 7, 78%) followed by Islamic and Oriental Sciences (Public =14, 82% and Private = 5, 56%) and Arts and Humanities (Public =12, 71% and Private = 6, 67%) respectively.

Collection development in the areas of pure, applied and life sciences i.e. Agriculture, Medical, Engineering and Life and Environmental Sciences comparatively show low figures. However, it was noted that the number of universities specifically dealing with Engineering, Medical and Agriculture Sciences are small in the province. Due to

economic and academic factors, most of the public and private sector universities have started these subjects parallel to their general disciplines. Collection development in these subjects has yet to grow with the passage of time. Those universities which are specifically dealing with pure science, applied and life sciences, allocate maximum budget for collection development in their libraries. Other universities offering special subjects other than their specific disciplines do allocate budget for collection development to fulfil their students and faculty's educational, academic and research demands. However, the allocated budget for special subjects are little and sometimes insufficient.

Another reason might be that, books including text, general and reference related and offered in pure, applied and life sciences are mostly written by foreign authors and their rates are either in Dollars, Pounds or Euros etc. which sometimes not only fall beyond the budget limits of local libraries but in case of their unavailability in local markets, also create problems in their acquisition from abroad. This is how collection development in these areas is small.

Table 4.4

Frequency Distribution of the Major Disciplines Covered in the Universities (N=26)

S.No	Disciplines Covered	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Arts and Humanities	12	70.6	6	66.7	18	69
2.	Islamic and Oriental Studies	14	82.4	5	55.6	19	73
3.	Numerical and Physical Sciences	12	70.6	5	55.6	17	65
4.	Life and Environmental Sciences	9	52.9	4	44.4	13	50
5.	Management and Information Sciences	14	82.4	7	77.8	21	81
6.	Social Sciences	15	88.2	6	66.7	21	81

7. Medical Sciences	7	41.2	4	44.4	11	42
8. Engineering Sciences	6	35.3	6	66.7	12	46
9. Agricultural Sciences	7	41.2	3	33.3	10	38

Note: Multiple options were permitted

4.1.4 Users' Community

4.1.4.1 Undergraduates Students

The undergraduates' students constitute major population of users' community in the universities of KPK. It was noted that in the wake of bachelors (BS) programs devised by the HEC in various subjects after intermediate, the enrolment of students, both in public and private sector universities has increased. Table 4.5 shows that five public sector universities have up to 2000 undergraduates' students enrolments in various disciplines which frame 29.4% of the students' community followed by 4 (23.5%) universities each showing their undergraduate students' population in the range of 1001 to 1500 and 500 to 1000 respectively.

On the other side, majority 7(78%) of the private sector universities have their undergraduate students community between 500 and 1000. Since, it was noted by the researcher during visits to these universities that the fee structure of private sector universities is much higher than public sector which is beyond the reach of middle class students. Therefore, under such circumstances the flow of majority of students seeking admissions in different disciplines is towards the public sector universities which comparatively have low fee structures.

Table 4.5

Frequency Distribution of Undergraduate Users Community

S.No	No of Undergraduate Users	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	500 to 1000	4	23.5	7	78	12	50
2.	1001 to 1500	4	23.5	1	11.1	5	19
3.	1501 to 2000	3	17.6	1	11.1	3	12
4.	2001 to 2500	5	29.4	0	0	5	19
5.	2501 & above	1	5.9	0	0	1	4
Total		17	100.0	9	100	26	100

Note: No of undergraduates as on December 31st, 2012

4.1.4.2 Postgraduate Students

Following undergraduates, postgraduates' students are next large community of the universities of KPK. Table 4.6 shows that 7 universities in the private sector have the range of postgraduates' students between 500 and 1000. On the other hand the public sector universities have the highest number of such students in different categories. The data provided by three universities each, show that their postgraduates' students are more than 2500. Other two mentioned the range of their postgraduates' students' community up to 2000 and 2500 respectively.

Table 4.6

Frequency Distribution of Postgraduate Users Community

S.No	No of Postgraduate Users	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	500 to 1000	7	41.2	7	78	14	54
2.	1001 to 1500	1	5.9	1	11.1	2	8
3.	1501 to 2000	3	17.6	1	11.1	4	15
4.	2001 to 2500	3	17.6	0	0	3	12
5.	2501 & above	3	17.6	0	0	3	12
Total		17	100	9	100	26	100

Note: No graduate students as on December 31st, 2012

4.1.4.3 Researchers

The researchers' category in this study included all MS/MPhil and PhD students enrolled in all the public and private sector universities of KPK till December, 31st, 2012. Table 4.7 shows researchers' frequency distribution in different categories in public and private sector universities. It was observed that seven universities both in public (41.2%) and private (78%) sectors have the number of enrolled researchers ranging from 500 to 1000. For further details the information is provided in the table.

Table 4.7

Frequency Distribution of Researchers' Community

S.No	No of Researchers	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	500 to 1000	7	41.2	7	78	14	54

2.	1001 to 1500	1	5.9	0	0	1	4
3.	1501 to 2000	3	17.6	0	0	3	12
4.	2001 to 2500	3	17.6	0	0	3	12
5.	2501 & above	3	17.6	2	22.3	5	19
Total		17	100	9	100	26	100

Note: No researchers as on December 31st, 2012

4.1.4.4 Academics

Academics are the teaching faculty of the universities i.e. Lecturers, Assistant Professors, Associate Professors and Professors. Table 4.8 illustrates that nine (53%) universities in the public sector have more than 2500 teaching faculty followed by six universities where 500 to 1000 teachers work.

The number of teaching faculty is comparatively low in the private sector because of the limited number of universities as compared to public. It was noted that the strength of academics in the private sector universities is ranging from 500 to 1000 teachers.

Table 4.8

Frequency Distribution of Academic Community

S.NO	No of Teachers	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	500 to 1000	6	35.3	9	100	15	58
2.	1001 to 1500	2	11.8	0	0	2	12
3.	2501 & above	9	52.9	0	0	9	53
Total		17	100.0	9	100	26	100

4.1.4.5 Administrative Staff and External Users

Though, university libraries are bound to provide access facilities to administrative staff and external users. But the provision of this privilege varies from university to university. It was noted that majority of the universities, both in public and private sectors allow their administrative staff to have access to the library holdings.

The policies of proving access to the external users was somehow strict. Only 2 universities each in public and private sectors provide access facilities to the external users whereas the rest of the universities i.e. 15 in public and 7 in private sectors do not have policies or their policies do not offer such provision for the external users.

4.2 Information about Collections of University Libraries

4.2.1 Printed Materials: Books, Journals, Magazines and Newspapers

All university LIS professionals were asked to provide information about their printed collection. This question was included in the questionnaire with the purpose to know about the strength of printed materials including books, journals, magazines and newspapers in the university libraries of KPK till 31st December, 2012. The data illustrate that majority of the universities both public and private have developed their book collection more effectively as compare to other type of reading materials. University of Peshawar reported the largest number of books (2, 19,025) followed by University of Engineering and Technology, (UET), Peshawar (1, 13,600).

Similarly CECOS, University Peshawar reported the largest number of books (30,000) in the private sector. The collection of books and other reading materials in the libraries of the newly established universities seems to be low. However, it was noted during personal visits of the researcher to these universities that they have allocated huge amounts of budget for libraries under different heads. Since, these libraries serve limited disciplines being newly established; therefore collection is developed where required.

A cross comparison of collection size of public and private sector university libraries show a parallel relationship except the oldest universities where the collection size is much prominent and incomparable.

Research journals were subscribed by all private sector universities but on the other hand only 9 public sector universities mentioned the subscription of journals. Similarly magazines were also subscribed by most of the public and private sector universities for their libraries. University of Peshawar reported the largest number (23) of subscription of newspapers for library.

Table 4.9

Information about Printed Collection in the Public Sector Universities of KPK

S. No	Name of Universities	Books	Journals	Magazines	Newspapers
1.	University of Peshawar, Peshawar, Peshawar	2,19,025	13832	10	27
2.	NWFP University of Engineering. & Technology, Peshawar, Peshawar	1,13,600	-	-	5
3.	KPK Agricultural University, Peshawar, Peshawar	91755	-	-	7
4.	Hazara University, Dodhial, Mansehra, Mansehra	50000			
5.	Abdul Wali Khan University, Mardan, Mardan	33000	-	-	5
6.	Islamia College University, Peshawar, Peshawar	30000	-	-	4
7.	University of Science &	30000	-	-	8

	Technology, Bannu, Bannu				
8.	Kohat University of Science and Technology, Kohat, Kohat	25000	-	-	6
9.	University of Malakand, Chakdara, Dir, Malakand	25000	50	100	10
10.	Gomal University, D.I. Khan, D.I.Khan	19864	3000	10	9
11.	Frontier Women University, Peshawar, Peshawar	12000	4	4	4
12.	Khyber Medical University, Peshawar, Peshawar	10000	-	-	4
13.	University of Haripur, Haripur	10000	20	-	7
14.	University of Swat, Swat, Swat	8232	893		5
15.	University of Swabi, Swabi	8100	30		8
16.	Shaheed Benazir Bhutto University, Sheringal, Dir, Dir	6000	500	50	6
17.	Bacha Khan University Charsadda, Charsadda	6000	7	-	5

Note: Collection as on 31st December, 2012

Table 4.10

Information about Printed Collection in the Private Sector Universities of KPK

S. No	Name of Universities	Books	Journals	Magazines	Newspapers
1.	CECOS University of Information Technology & Emerging Sciences, Peshawar	30,000	1000	100	5

2.	Gandhara University, Peshawar	20,000	5000	-	5
3.	Preston University, Kohat	20,000	100	150	3
4.	Qurtaba University of Science and Information Technology, D.I. Khan	20,000	2000	100	
5.	Sarhad University of Science and Information Technology, Peshawar	20,000	1000	-	4
6.	Northern University, Nowshera	15,000	2000	-	6
7.	City University of Science and Information Technology, Peshawar	10,000	2000	200	5
8.	Iqra National University, Peshawar	10,000	1000	-	7
9.	Abasyn University, Peshawar	9980	20	-	6

Note: Collection as on 31st December, 2012

4.2.2 Non Printed Materials: Manuscripts, A/V Materials, CD ROM Databases, and Online Databases

Among the non-printed materials, manuscripts were part of collection in two public sector universities, namely University of Peshawar and Islamia College University Peshawar. The libraries of these universities reported the possession of 696 and 1261 manuscripts in their library collections respectively. The ratio of A/V materials and CD ROM databases was very low, reported by 3 universities each, both in public and private sectors. Thirteen universities in the public and eight in the private sectors reported access to online database via HEC Digital Library. This shows that HEC Digital Library have placed

an impact on the use of traditional sources of information. The overall response rate shows that 78% of the universities in the province are using HEC Digital Library for online access to information which shows a radical impact on the overall cause of higher education in the province.

4.2.3 Library Staff

In order to understand the administrative setup of the libraries, respondents were asked to provide information about their staff strength working in various cadres. Information about professional staff i.e. chief librarian, deputy librarian, assistant librarian, para, non and IT professionals were sought. All libraries (N=26) in public and private sectors provided information to this question.

It was noted that in the wake of information technologies and infiltration of electronic and digital materials into the traditional collection of university libraries, eight universities have appointed IT professionals to handle the collection development activities of electronic resources and perform other relevant activities. Though, this amount shows a marginal (31%) but an encouraging trend of universities toward the adoption of information technologies in the process of collection development and management activities in their libraries.

The responsibility of collection development and management in the university libraries received random figures showing it a shared responsibility of library staff in various cadres. However, in public sector this responsibility is mostly delegated to and performed by the assistant librarians (59%). This might be because of the fact that due to the absence of service structures in most universities of KPK, the positions of chief and deputy librarians are either vacant/limited or not filled by the concerned authorities. Therefore, assistant librarians usually take charge of all issues in the libraries including collection development and management.

The concept of collection development librarian was present only in two public sector universities and not in any private sector university library. In private sector this responsibility is usually performed by the chief librarian (Table 4.11 and 4.12).

Table 4.11

Staff of the Library: General

S.No	Library Staff	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Professional	17	100	9	100	26	100
2.	Para professional	4	23.5	1	11.1	5	19.2
3.	Non professional	17	100	6	66.6	23	88.4
4.	IT professionals	4	23.5	4	44.4	8	31
5.	Other	2	11.8	0	0	2	8

Note: Multiple options were permitted

Table 4.12

Responsibility for Collection Development and Management in the University Libraries

S.No	Responsible Staff	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Chief Librarian	5	29.4	6	66.7	11	42
2.	Collection Development Librarian	2	11.8	0	0	2	8
3.	Deputy Librarian	3	17.6	2	22.2	5	19
4.	Assistant Librarian`	10	58.8	3	33.3	13	50
5.	Other	2	11.8	1	11.1	3	12

Note: Multiple options were permitted

4.3 Assessing Users' Needs

The mission and goals of any academic library revolve around meeting the informational, educational and research needs of the users' community. How do library professionals know about the needs of their users' community is a question which bears a central position in the successful collection development process (Gregory, 2011). Library professionals do users' needs assessments for different purposes including collection development and management, improving different library services, for building arrangements and different library administrative purposes.

To assess users' needs of the academic community; library professionals' apply a variety of methods including surveys, study of syllabi, knowledge of teachers and researchers filed of specializations, current research projects in the universities, circulation statistics and interlibrary loans requests. In order to build an effective collection many library professionals also held discussions with heads/chairperson and students representatives.

Library and information professionals reported that discussions with the heads of the departments and chairpersons were among the prime methods employed for assessing users' needs. Results of chi square ($\chi^2=1.762$, $\text{sig}=.208$) show that this method of users' needs assessment is significantly high in the public 15 (88%) and private 6(67%) sector university of KPK.

During interviews with LIS professionals, most of them pointed out that faculty member are specialists in their subject areas and they know well about their students' needs in specific subject areas. Therefore, a large portion of collection is built on the recommendations of the teachers. This too reflects a major participation of faculty in the process of books selection and acquisition.

Study of syllabi 14(6%), faculty and researchers' field of specialization 6(35%) and discussions with the students' representative 6(35%) were the next most popular methods of assessing users' needs in the public sector universities. Similarly these methods are equally common in the private sector universities as well.

The data also illustrate a complete absence of coordination among the university libraries within and across sectors. No university mentioned interlibrary loan requests in their methods of users' needs assessment. This shows isolated process of collection building in the university libraries of KPK.

The data in Table 4.14 presents that users' needs assessment methods in the universities of KPK are employed for different purposes i.e. collection development and management, improving different library services, library building arrangements and for administrative purposes. It was noted that more than 80% (21) universities use assessment techniques for collection development and management purposes followed by improving different library services 62%. Table 4.14 illustrate that universities also do users' needs assessments for administrative (7, 27%) and library building arrangements (5, 19%) purposes.

Table 4.13

Methods Employed for Assessing Users' Needs

S.No	Methods	Sector						Chi Square & Sig
		Public (N=17)		Private (N=9)		Aggregate		
		N	%	N	%	N	%	
1.	Conduct surveys	2	12	3	33	5	19	($\chi^2=1.762$, sig=.184)
2.	Consult syllabi	14	66	4	44	18	69	($\chi^2=.990$, sig=.320)

3.	Study of faculty and research scholars' field of specializations	6	35	4	44	10	38	($\chi^2=.208$, sig=.648)
4.	Study of on-going research projects	2	12	2	22	4	15	($\chi^2=.492$, sig=.431)
5.	Circulation statistics	3	18	3	33	6	23	($\chi^2=.816$, sig=.332)
6.	Interlibrary loan requests	0	0	0	0	0	0	($\chi^2=0$, sig=0)
7.	Discussions with the HoDs/Chairpersons	15	88	6	67	21	80	($\chi^2=1.762$, sig=.208)
8.	Discussions with students' representatives	6	35	2	22	8	31	($\chi^2=.472$, sig=.413)

Note: Multiple options were permitted (Level of confidence=95%)

Table 4.14

Purposes of Users' Needs Assessment

S.No	Purposes	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	For collection development and management	13	77	8	89	21	81
2.	For improving different library services	12	71	4	44	16	62
3.	For library building arrangements	3	18	2	22	5	19

4.	For library administrative purposes	4	24	3	33	7	27
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Note: Multiple options were permitted

4.3.1 Collection Development and Management Policies

The literature depicts that collection development and management policies serve as a blueprint for the operations of libraries. Collection development and management policies inform the administrators, library professionals, teaching and students communities about the role of library in supporting the institutional missions and objectives. Most importantly it provides a course of action to the librarians and guides the process of selection, acquisition, funds allocation for various subjects, and weeding purposes.

Looking to the importance of collection development and management policies, libraries were asked to provide information about their collection development and management policies. Libraries with formal written collection development and management policies were also requested to provide a copy of the same.

The data analysis shows a complete absence of collection development and management policies in the university libraries of KPK. Only one university in the public sector “Shaheed Benazir Bhutto University” previously known as “Frontier women university, Peshawar” mentioned the presence of a written collection development and management policy, but it was noted that this university was formerly working as Girls College under the HED, Government of KPK which was granted the status of university in 2005. The rules specified by HED for purchasing books and other reading materials for college libraries and annual budget allocation were still followed by this university 2012. This means that “Shaheed Benazir Bhutto University” is running the businesses of library affairs on the adopted rules of HED, and they have not yet developed their independent collection development and management policies.

It was observed that in the absence of formal written collection development and management policies, most university libraries have some type of documents containing independent random procedures for selection, acquisition, and other library activities.

Table 4.15

Formal Written Policies for Collection Development and Management

S.No	Collection development and management Policies	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Yes	1	35.3	0	22.2	1	4
2.	No	16	64.7	9	77.8	25	96
Total		17		9		26	

4.3.2 Goals of Collection Development and Management Policies and Procedures

The main objective of collection development and management on the academic side is to support the institution's mission and objectives, promote research, preserve materials for future generations, and to maximise the accessibility of information to the users in an individual as well as collective capacity by entering into consortial programs.

On the administrative side these objectives revolve around taking sound decisions in the selection and acquisition of materials, both print and electronic, allocation of budget, its increase and decrease according to the need, responsibility of selection and acquisition and other relevant issues.

The study found that most of the libraries have some documents relating to collection development and management procedures, often including selection, acquisition and weeding rules and procedure but do not work as formal written policies. To know about the goals, aims and objectives of the existing policies and procedures of the university

libraries of KPK, eleven points were provided to the respondents to mention the academic and administrative functions of their collection development and management policies and procedures.

The data analyses reflect multiple academic and administrative goals and objectives of collection development and management policies and procedures of the university libraries of KPK. On the academic side, the data provided by 96% and 88%, libraries show that “to support the missions of parent institutions and promote their educational role” are the main objectives of their collection development and management policies and procedures. Parallel to these objectives, more than 70% libraries mentioned to make library materials easily accessible and preserve them for future are the main aim of their policies and procedures. Other major objectives were “to promote research at regional, national and international level”, “to make information sources available to the library users” and to rationally develop collections in response to the new research needs of the users” mentioned by 69%, 65% and 54% respectively.

On the administrative side, 46% libraries mentioned that the goals of their collection development and management policies and procedures are to make the best use of the existing financial resources followed by making informed decisions regarding format choice, both print and electronic (38.4%), and to maintain a balance between them in the wake of increasing electronic resources (34%). Making the availability of special resources through collaborative ventures was part of the policies and procedures of 34% university libraries of the province.

The analysis of data shows that the focus of collection development and management policies and procedures of the university libraries of KPK is more on the academic side than administrative. This shows that the essential aspect of these policies and

procedures are toward the provision of information services to the users' communities which is the main objective of any university library.

Table 4.16

Goals of Collection Development and Management Policies and Procedures

S.No	Statements	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	To support the institution's mission and objectives	16	94	9	100	25	96
2.	To promote research among regional, national, and international researchers	12	71	6	67	18	69
3.	To promote the educational role of the institution	16	94	7	78	23	88
4.	To make material accessible	13	77	7	78	20	77
5.	To preserve the material for users now and in the future	13	77	6	67	19	73
6.	To provide material by ensuring its availability to users	13	77	4	44	17	65
7.	To rationally develop collections in response to new research needs	9	53	5	56	14	54
8.	To make the best use of existing financial resources	10	59	2	22	12	46
9.	To make informed decisions in terms of format choices	7	41	3	33	10	38

10.	To develop and maintain a balanced CM program in light of increasing electronic resources	7	41	2	22	9	35
11.	To maximize the availability of special resources by entering and maintaining collaborative programs	6	35	3	33	9	35

Note: Multiple options were permitted

4.4 Selection

The responsibility of selecting library materials is considered vital in the process of collection development and management in the university libraries. The literature on “who shall have the authority to select library materials” is grouped into two camps. One group believes that LIS professionals hold final responsibility for the selection of library materials and the other considers faculty members. However, it is generally believed that LIS professionals working in close relationship with the faculty members are in best position to build a relevant collection according to the information needs of the users’ community.

Regarding the methods of selection Table 4.17 shows that the results of “departments select materials according to their needs and submit lists to the central library, ($\chi^2=3.172$, sig=.075)” are significantly different. This indicates that in most 12(46%) of the universities, different departments select their required materials and submit lists of selected materials to the central library for acquisition. The selection of materials through concerned university purchase committees are made by 31% universities. Moreover, the data about selection of library materials by library committees and independent purchases by the central libraries’ according to the allocated budget received little scores which are 23% and 11% respectively.

The analyses project centralized selection procedures in the public and private sector universities of KPK with faculty's influence on the overall processes of selection of materials.

A sound selection process requires coordinated efforts of selection team, designated for the task. However, data in Table 4.18 reveals that 54% universities do not have selection teams. Which means that in the absence of selection teams, there is an apprehension that a balanced and quality collection development would be futile? Moreover, universities libraries are already under severe financial burdens and the absence of selection teams would further stretch the already limited financial resources of the university libraries.

The role of senior LIS professionals in the process of selection of library materials presents a small amount. The ratio of participation of junior staff/ assistant librarians (38.4%) is more than chief (31%) and deputy chief librarians (15.3%). It was also noted during research's personal visits, that in 27% cases the universities' administrations including Registrar, Deputy Registrar and the Vice Chancellor take charge of everything and LIS professionals are given no participation in the process of selection.

The findings from the analyses and interpretation of quantitative data regarding selection procedures in the university libraries of KPK show that "LIS professionals roles are more of facilitators than stockholders" in the process of selection. Overall analyses show little role of LIS professionals in the selection decision making process which indicates lack of coordination among LIS professionals, faculty members and university administration.

Table 4.17

Frequency Distribution of the Process of Selection of Materials in the University Library

S.No	Process/Methods of Selection	Sector						Chi Square & Sig
		Public (N=17)		Private (N=9)		Aggregate		
		N	%	N	%	N	%	
1.	Through university's Purchase Committees	6	35.3	2	22.2	8	31	($\chi^2=.472$, sig=.492)
2.	Through university's Library Committees	4	23.5	2	22.2	6	23	($\chi^2=.060$, sig=.940)
3.	Independent purchase by the central library according to the allocated budget	2	11.8	1	11.1	3	11.5	($\chi^2=.002$, sig=.960)
4.	Departments select materials according to their needs and submit lists to the central library	10	58.8	2	22.2	12	46.1	($\chi^2=3.172$, sig=.075)

Note: Multiple options were permitted (Level of confidence=95%)

Table 4.18

Frequency Distribution of Designated Staffs involved in the Process of Selection of Materials

S.No	Selection Team	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	6	35.3	6	66.6	12	46.1
2.	No	11	64.7	3	33.3	14	54
Total		17		9		26	

Table 4.19

Frequency Distribution of Main Responsibility of Participation in the Process of Selection

S.No	Staff	Sector						Chi Square &
		Public		Private		Aggregate		Sig
		N	%	N	%	N	%	
1.	Chief Librarian	4	23.5	4	44.4	8	31	($\chi^2=1.208$, sig=.272)
2.	Deputy Chief Librarian	1	5.9	3	33.3	4	15.3	($\chi^2=3.406$, sig=.065)
3.	Assistant Librarian (nominated and delegated the power to participate)	9	52.9	1	11.1	10	38.4	($\chi^2=4.350$, sig=.037)
4.	Registrar, Vice Chancellor, Administrators etc.	5	29.	2	22.2	7	27	($\chi^2=.155$, sig=.694)

Note: Multiple options were permitted (Level of confidence=95%)

4.4.1 Languages in Which Most of the Materials are Selected

The data in Table 4.20 and 4.21 indicate “English” the popular language in which most of the materials are selected in the university libraries, followed by Urdu, Arabic and regional language “Pashto”. The medium of instructions and curriculum in most of the universities in KPK is “English”. Therefore, materials in English language constitute major portion of library stocks in universities.

A master degree is offered in Urdu in some universities, but there are some subjects which are also offered in Urdu language like Islamic studies, Bachelor of Education and

Master of Education etc. The subject of Islamic studies is not only offered in Urdu but contain some portions in Arabic language as well. Parallel to it, a master degree is also offered in Arabic in the public sector universities of KPK. Pashto is the regional language which is the most popular and commonly spoken in KPK. An MA, Master of Philosophy (M.Phil) and Doctor of Philosophies (PhD) degrees are offered in Urdu, Islamic Studies, Arabic, Education and Pashto. This is why, books and other reading materials, in most of the university libraries include these subjects in greater proportionate after English.

Table 4.20

Frequency Distribution of Languages Wise Selection of Materials

S.No	Language	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	English	17	100	9	100	26	100
2.	Urdu	15	88.2	7	77.8	22	84.6
3.	Arabic	7	41.2	2	22.2	9	34.6
4.	Pashto	7	41.2	3	33.3	10	38.4
5.	Hindko	1	5.9	1	11.1	2	8
6.	Punjabi	1	5.9	0	0	1	4
7.	Sindhi	0	0	0	0	0	0
8.	Persian	1	5.9	0	0	1	4

Note: Multiple options were permitted

Table 4.21

Frequency Distribution of Proportionate of Language Wise Selection of Materials

S.No	Language	10 to 20 %	21 to 30 %	31 to 40 %	41 to 50 %	51 %& above
1.	English	-	-	1(5.9)	-	15(88.2)
2.	Urdu	12(70.6)	-	1(5.9)	-	-
3.	Arabic	5(29.4)	-	1(5.9)	-	-
4.	Pashto	5(29.4)	-	1(5.9)	-	-
5.	Hindko	1(5.9)	-	-	-	-
6.	Sindhi	-	-	-	-	-
7.	Persion	1(5.9)				
8.	Punjabi	1(5.9)	-	-	-	-

Note: Multiple options were permitted

4.4.2 Formats in Which Most of the Materials are Selected

Traditionally, academic libraries collect materials mainly consisting of printed matters both books and other reading materials. However, the revolution of emerging technologies has altered the conventional library system. To investigate the format choices and find out whether a hybrid culture is taking place in the university libraries, specific questions were asked from the LIS professionals through survey questionnaire. The analysis of questionnaire data shows that books and serials are preferably selected in printed format in all the universities of KPK. It was encouraging to note that 46% books and 50% journals in electronic format are also selected by both public and private sector universities for inclusion in their library collections. This indicates a shift in the formats in which information is offered to the library users. Though the acceptance of electronic books is comparatively slow than that of electronic journals but are gradually gaining popularity among the university libraries of KPK.

Table 4.22

Frequency Distribution of Format wise Selection of Materials

S.No.	Type of Universities	Frequency			
		Paper Format		Electronic Format	
		Books	Serials	Books	Serials
1.	Public Sector Universities (n=17)	17(100)	16(94.1)	7(41.2)	8(47.1)
2.	Private Sector Universities (n=9)	9(100)	9(100)	5(55.5)	5(55.5)
	Aggregate % (n=26)	26(100)	25(96.1)	12(46.1)	13(50)

Note: Multiple options were permitted

4.4.3 Selection of Electronic Resources in the University Libraries of KPK

The emergence of information and communication technology has repositioned the frontier of academic library resources. This has made academic libraries struggling to keep their place as a major source of inquiry. Before the advent of ICT academic libraries were the sole custodians of information, which was predominantly in print. But in the present era, they can no longer restrict themselves to print resources because electronic information is challenging their monopoly. Under these circumstances academics, libraries can maintain their place by serving as an access point to both print and electronic resources (Anunobi and Okoye, 2008).

Figure 4.2 presents that out of 26 (Public=17 and Private=9), 8 (47%) public and 5 (55.5%) private sector universities select electronic resources for inclusion in their library collection. The aggregate figure shows that the trend of selecting electronic resources has taken place in 50% universities of the province. There is no significant difference between the universities of both sector regarding the selection of electronic resources. However, private sector has an edge over public sector in this regard. Four public and three private

sector universities have selection teams for the selection of electronic resources in their libraries. Moreover, two public and three private sectors universities reported the inclusion of technical/computer experts in their selection teams for checking the compatibility of electronic resources according to their libraries environment, users' demands and available facilities.

The analyses of data show that a change is gradually taking place in the university libraries of KPK where they are adapting to the new trends and are trying to be providers of access to information than merely stacks of books.

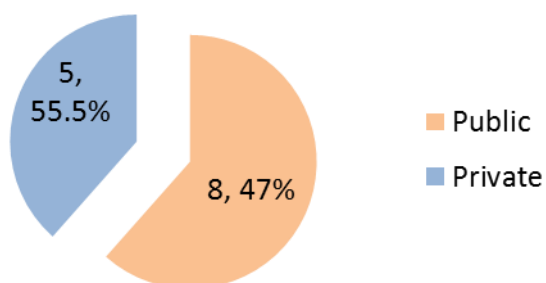


Figure 4.2: Frequency Distribution of electronic resources in the university libraries of KPK

Table 4.23

Frequency Distribution of Team for Selecting Electronic Resources

S.No	Selection Team	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Yes	4	23.5	3	33.3	7	27
2.	No	4	23.5	2	22.2	6	23
Total		8		7		13	

Table 4.24

Frequency Distribution of Technical Expert in the Selection Team for electronic resources

S.No	Technical Expert	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Yes	2	11.8	3	33.3	5	19.2
2.	No	2	11.8	2	22.2	4	15.3
Total		4		5		9	

4.4.3.1 Evaluation of Electronic Resources

Determining the accuracy of materials available through an electronic resource, particularly those derived from web resources is critical to the selection and evaluation process. One of the strength of the World Wide Web (www) is the ease of publication and distribution of information to the world, however this strength is the greatest weakness since it essentially places the burden on the information users to determine and evaluate the

source available through web (Gregory, 2011). Other necessary issues, related to the electronic resources are looking at their equilibrium level with print resource, price and copyright related matters. These issues are required to be considered while selecting electronic resources. In otherwise case, it can create multiple problems for research scholars, university administration and professional librarians at organizational level.

The data in Table 4.25 show that most of the universities look for the authoritativeness of electronic resources while selecting an electronic resource followed by copyright and price related issues.

It was noted that university libraries in KPK take care of important technical points in the selection of electronic resources including their authenticity, copyright and licensing related issues, users' needs and their accessibility, compatibility in the library environment, cost factor and duplication related matter which reflect their sensitivity towards the hybrid culture.

Table 4.25

Frequency Distribution of Evaluation of Electronic Resources

S.No	Evaluation Criteria	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Is the resource authoritative/authentic?	6	35.3	4	44.4	10	38.4
2.	Is the resource licensed and copyright protected?	5	29.4	3	33.3	8	30.7
3.	Does the technology make the contents of the e-resources accessible in a manner	3	17.6	3	33.3	6	31

that better serves users' needs than does
an existing equivalent print resource that
library already have?

4.	Does the electronic resource fill current gaps in the print collection?	4	23.5	2	22.2	6	23
5.	Does the electronic resource duplicate information or materials that are already owned by the library?	3	17.6	3	33.3	6	23
6.	Does the library replace a current print resource with an electronic one and what are the price ramifications of doing so?	3	17.6	1	11.1	6	23
7.	Charges/Price	3	17.6	4	44.4	7	27

Note: Multiple options were permitted

4.4.4 Use of Selection Aids

Evan and Saponaro (2005) state that selection tools, bibliographies, reviewing sources, etc. provide information, to some degree, an overview of the output of publishers and media procedures. They are time saving tools essential to the efficient functioning of the library. To enquire the status of selection aids used by the university libraries, respondents were provided with a list of common selection tools containing both convention/traditional and modern selection aids and were asked to mention the frequency of their usage.

The analyses of the answers to the questions in Table 4.26 show that majority of the libraries depend mainly on publishers catalogues with frequency 21(81%). The data in following table illustrates that use of traditional sources of books selection are common in the university libraries of KPK. The data also indicate the use of online sources as selection aids in the process of selection of materials in the university libraries of the province. The

aggregate figure shows that more than 50% university libraries of KPK use online selection aids for selecting library materials.

Table 4.26

Frequency Distribution of Selection Tools

S.No	Selection Aids	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Vendors lists	12	70.6	3	33.3	15	58
2.	Current trade bibliographies	5	29.4	1	11.1	6	23
3.	Publishers' catalogues	15	88.2	6	66.7	21	81
4.	Reviews from newspaper and magazines etc.	1	5.9	0	0	1	4
5.	Book fairs and bookshops	10	58.8	3	33.3	13	50
6.	Online sites for identifying titles (Amazon, Bookfinder etc.)	6	35.3	4	44.4	10	38
7.	Through email alerts from online databases (Science Direct, Sage Publication, Questa, emerald, etc.)	2	11.8	2	22.2	4	15.3

Note: Multiple options were permitted

4.5 Acquisition of Library Materials in the Universities of KPK

In Pakistan, to support teaching and research, most of the library materials are acquired from abroad, mostly from USA and UK (Ameen, 2004). Local literature depicts that the acquisitions environment is obstructed by many factors including insufficient

number of reputed book sellers in the country, undersupplied foreign current academic and research stocks in the market, insufficient number of local publications to meet educational needs, difficulties in the acquisition of government publications and research reports, lack of funds, problems of exchange rate, economic recession, insufficient budget allocation for university libraries, attempts by booksellers to supply old books at new prices, non-cooperation from local vendors, delayed supply of foreign books, lack of trust toward librarians and lack of delegation of authority for making acquisition decisions, lack of books in indigenous languages, and exorbitant costs of imported materials. The current study attempted to investigate these problems and to know about the methods of acquiring foreign and local reading materials.

The data provided by libraries show that most of the materials are acquired through purchase from local books sellers 23(88.4%) followed by gifts and donations. Two public sector universities also mentioned the acquisition of materials through exchange programs. However, it was observed during researcher personal visits that this program was only limited to the exchange of institutional research journals, magazines and not to books and other reading materials.

The data in Table 4.28 also illustrates that 58% of the libraries in both sectors place orders through books supplying agencies to acquire local reading materials from markets. Visiting bookshops also appeared a common method of selecting books and other reading materials, mentioned by 50% respondents. Eleven respondents mentioned that book fairs/exhibitions also help them in selecting library materials.

Table 4.27

Frequency Distribution of Methods Used for the Acquisition of Library Materials

S.No	Methods	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Purchases	17	100	9	100	26	100
2.	Gifts and donations	14	82	4	44	18	69.2
3.	Exchange of materials	2	12	0	0	2	8

Note: Multiple options were permitted

Table 4.28

Frequency Distribution of the Acquisition of Local Materials

S.No	Methods	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	From vendors	8	47.1	3	33.3	11	42.3
2.	From publishers	5	29.4	2	22.2	7	27
3.	From Booksellers	16	94.1	7	77.8	23	88.4
4.	Orders are placed through book supplying agencies	10	58.8	5	55.5	15	58
5.	Personal visits are made to market	9	52.9	4	44.4	13	50
6.	Through book fairs/exhibitions	9	52.9	2	22.2	11	42.3

Note: Multiple options were permitted

4.5.1 Acquisition of Foreign Materials

Review of local literature shows that university libraries in Pakistan contain imported reading materials in a larger proportionate than local. Moreover, the boom in education industry created a vast market for text books, both for school and post-school levels. Where the primary sector is largely catered to by the local textbook boards, but there is a serious dearth of books on professional subjects like medical, engineering or business. This situation has increased the demand for foreign books. Due to import limitations the prices of foreign books are totally out of reach of an average Pakistani student. The National Book Foundation (NBF) was set up to reprint and translate foreign titles with the permission of the original publisher. This was to make the prices affordable and within reach, but even this effort was not as successful as expected because most of the reprinted titles were either obsolete or were very old editions. This shows that Pakistan lacks adequate infrastructure to support the development of indigenous publishing activities (personal communication with Director NBF, Hayatabad, KPK, dated 5th December, 2014).

Libraries were asked to provide data about the acquisition of foreign materials. It was noted that majority of the public and private sector universities prefer to acquire foreign books and other reading materials from local bookseller and agents. This method is the most convenient way of acquiring foreign books without time lag, issues of foreign exchange, shipment, and custom clearance etc. However, it is the case when foreign materials/books/journals are availability in the local market. In case, if, the required foreign materials are not available in the local market and cannot be supplied by the local agents, then 16 (61.5%) universities reported the acquisition of foreign materials through local book supplying agencies whereas; two universities directly approach the foreign book supplying agencies/booksellers to acquire the needed books and other reading materials directly from abroad.

It becomes apparent from the data that the trend of acquiring foreign books through local booksellers is the most convenient and popular among the universities of KPK. They do not embark upon acquiring materials directly from the foreign countries. However, in case of urgency, need and unavailability of foreign materials, effort are made to acquire them either through local book supplying agents or directly from the foreign country.

Table 4.29

Frequency Distribution of the Acquisition of Foreign materials

S.No	Methods	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Directly from the foreign agency/booksellers	1	5.9	1	5.9	2	8
2.	From local Booksellers and agents	14	82.4	12	82.4	26	100
3.	Orders are placed through book supplying agencies	8	47.1	8	47.1	16	61.5

Note: Multiple options were permitted

4.5.2 Major Hindrances/Problems Faced in the Acquisition of Library Materials

The availability of scientific literature has added more challenges to the tasks of collection managers. The electronic resources have brought place more impact on materials budget; for instance, what percentage of an acquisition budget needs to be appropriated for the material in electronic format versus print? Collection managers also have had to deal with decreasing purchasing power due to shrinking budgets and rising inflation. The problems become more intense in the absence of a resource-sharing culture in the country. Another aspect of the problem is that majority of users still maintain a strong loyalty to print books (Haider, 2007a).

To analyse and assess the acquisition policies and procedure of the university libraries in KPK, LIS professionals were asked to mention various problems and issues they face in the process of acquisition. The analyses of the obtained answers show that lack of funds to universities has been the main problem which affects the acquisition of 17(65%) universities of the province. The analysis of the next following figure shows the effect of university budget constraints on the libraries, which seem to have trickled down to libraries. Sixteen (61.5%) universities mentioned that their acquisition activities have received an adverse effect due to insufficient share in the university budget. This factor might have also affected the acquisition of foreign materials in the university libraries. Limited budget allocations combine with rising inflation and recession in the economy are the indicators confirming the effect of budget on the acquisition departments, acquiring foreign materials in the university libraries.

Other problems included insufficient number of reputed book sellers in the country followed by delayed supply of foreign books mentioned by 11(42.3%) and 10(38.4%) libraries respectively. Poor number of local publications to meet educational needs and high costs of imported materials were reported by each 35% libraries. Undersupplied foreign current academic and research stocks in the local market, problems of exchange rates and attempts by booksellers to supply old books at new prices, lack of trust toward librarians and lack of delegation of authority for making acquisition decisions followed by lack of books in indigenous languages were mentioned by each 6(23%) libraries. Table 4.30 illustrates that acquisitions offer the widest spectrum of problems in the university libraries of KPK.

Table 4.30

Frequency Distribution of Major Hindrances/Problems Faced in the Acquisition of Library Materials

S.No	Problems in Acquisition	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Insufficient number of reputed book sellers in the country	8	47.1	3	33.3	11	42.3
2.	Undersupplied foreign current academic and research stocks in the market.	5	29.4	1	11.1	6	23
3.	Poor number of local publications to meet educational needs.	8	47.1	1	11.1	9	35
4.	The acquisition of government publications and research reports is very difficult.	3	17.6	1	11.1	4	15.3
5.	Lack of funds	13	50	4	44.4	17	65.3
6.	Problem of exchange rate	4	23.5	2	22.2	6	23
7.	Economic recession	3	17.6	2	22.2	5	19.2
8.	Insufficient budgets for university libraries	11	64.7	5	55.5	16	61.5

9. Attempts by booksellers to supply old books at new prices.	5	29.4	1	11.1	6	23
10. Local vendors do not cooperate	2	11.8	1	11.1	3	11.5
11. Delayed supply of foreign books.	8	47.1	2	22.2	10	38.4
12. Lack of trust toward librarians and lack of delegation of authority for making acquisition decisions	5	29.4	1	11.1	6	23
13. Lack of books in indigenous languages	4	23.5	2	22.2	6	23
14. Exorbitant costs of imported materials	7	41.2	2	22.2	9	35

Note: Multiple options were permitted

4.6 Gifts and Donations

History of academic libraries shows that they had seldom budget allocations for the purchase of books and other reading materials. Most support for academic libraries' collections came from gifts of books or donations to purchase them (Johnson, 2009). This is how gifts and donations are another way of acquiring and developing library collections. Library and information science professionals were asked to provide information about gifts and donations they receive in their libraries. To assist respondents' choice they were provided a readymade list which included the range of number of general books, textbooks, research articles, theses and dissertations, research reports, journals, conference proceedings, dictionaries, encyclopedias, newspapers, and magazines. They were also asked to provide information about the amount of donations received on annual basis.

The descriptive statistics in Table 4.31 presents information on gifts as a source of developing library collection. It indicates that books are the major sources of gifts received

in 15(58%) universities of KPK followed by theses and dissertation and government publications reported by each 9(35%) libraries. Eight (31%) followed by 7 (27%) universities reported the receipt of individual research articles and journals in the form of gifts. It was also noted that the amount of reference materials like dictionaries, encyclopedias and newspapers received as gifts are small in number, reported by only five university libraries (dictionaries were reported by three whereas encyclopedias were reported by two university libraries).

The overall analyses of the data in Table 4.31 show that all universities of KPK receive different kinds of materials including books and non-book materials with varied frequencies in the form of gifts. However, books are the major form of gifts received in libraries than any other reading materials.

With regard to the amount received/donated by individuals or organizations, it was reported that no amount have been received in the form of donation by any university library of the province for collection development and management.

Table 4.31

Frequency Distribution of Gifts received Per Annum by University Libraries (N=26)

S.No	Type of Materials	Volumes of Materials					N
		25 to 50	51 to 100	101 to 150	151 & above	Other	
1.	General books	6(35.3%)	-	4(23.5%)	3(17.6%)	2(11.8%)	15(58%)
2.	Text books	3(17.6)	1(5.9%)		2(11.8%)	1(5.9%)	7(27%)
3.	Research articles	4(23.5%)	-	1(5.9%)	1(5.9%)	2(11.8%)	8(31%)
4.	Theses and dissertations	6(35.3)	-	2(11.8%)	1(5.9%)	1(5.9%)	9(35%)

5. Research reports	3(17.6)	-	1(5.9%)	1(5.9%)	1(5.9%)	6(23%)
6. Serials/journals	6(35.3%)	-	-	-	1(5.9%)	7(27%)
7. Conference proceedings	1(5.9%)	-	-	-	1(5.9%)	3(12%)
8. Dictionaries	1(5.9%)	-	-	1(5.9%)	1(5.9%)	3(12%)
9. Encyclopaedias	1(5.9%)	-	-	1(5.9%)	1(5.9%)	2(8%)
10 News papers	-	-	-	1(5.9%)	1(5.9%)	2(8%)
11 Magazines	4(23.5%)	-	-	2(11.8%)	1(5.9%)	7(27%)
12 Government Publications	4(23.5%)	4(23.5%)	-	-	1(5.9%)	9(35%)

Note: Multiple options were permitted

4.7 Budgeting and Fiscal Management

Budgeting and fiscal management means the total amount of funds available and its proper utilization to meet libraries' expenditures over a fixed period of time. However, due to various economic factors budgeting and fiscal management varies almost every year i.e. LIS professionals report receiving an increase or decrease in the current year's budget compared to the previous year. Most of the academic libraries manage their budgets on a fiscal year, determined by the parent institutions/universities. In the universities of Pakistan the fiscal year runs on a July-through-June cycle.

Data about institution's total budget allocation during the period 2008-2012 for library collection development and other requirements i.e. binding, preservation etc. was acquired from the LIS professionals. Fourteen universities provided information about their past five years annual budget allocation whereas 12 did not. During interviews LIS professionals working in these universities (12 universities) expressed that since all financial matters are controlled by the finance department of their respective universities, therefore

they did not know about the fixed budget allocation. LIS professionals just prepare their list demands and send it to the authorities for approval which show their roles limited to order works only. In case, their demands are acceded to by the competent authorities then the budget is released according to the requirements. However, they also mentioned that they had never received the required amount; rather always get cuts and receive an insufficient share in the allocated budget.

Table 4.32 represents a random allocation of budget in the university libraries of KPK. It illustrates that the budget allocation of public and private sector universities is arbitrarily distributed, ranging between 2 lac to 1.5 and 1 million respectively. However, the million figures were reported by 6 public and 1 private sector university libraries.

Table 4.32

Frequency Distribution of Institutional Total Annual Budget Allocation for Library Collections

S.No	Budget in PKRs.	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	200,000 to 400,000	1	5.9	2	22.2	3	11.5
2.	400,000 to 600,000	2	11.8	2	22.2	4	15.3
3.	800,000 to 100,0000	4	23.5	1	11.1	5	19.2
4.	100,0000 to 1500000	1	5.9	0	0	1	4
5.	1500000 and above	1	5.9	0	0	1	4
Total		9		5		14	

4.7.1 Regularity of Budget for Libraries in the Universities

Regular provision of budgets to the academic libraries in the universities ensures the provision of effective information services to the users' community. Any interruption would violate the basic laws of librarianship i.e. every reader has his/her book, every book its reader and library is a growing organism. In order to find out the effectiveness of collection and different other services offered to the users in the university libraries of KPK, libraries were asked to provide information about the regularity of budget from their parent institutions/universities. The descriptive statistics in Table 4.33 illustrate that most of the universities regularly provide budget to their academic libraries. During the interviews it was noted that due to down trend in the national economy of Pakistan and the budget cuts on the universities since 2009, has affected the provision and regularity of budget to the university libraries. This is clear from the figures of Table 4.33 that nearly half of the universities 12(46%) reported that their budgets had been irregular since 2009.

Ten (38.4%) libraries reported that their parent institutions are taking initiatives to increase their existing budget for library's collection development and other relevant activities. However, the data in Table 4.34 illustrate an unstable condition of budget regularity in the university libraries of KPK. Fifteen (58%) libraries reported no effort on behalf of their parent institutions to increase libraries' budget to cop up with collection development and management issues. Out of these fifteen universities, eleven were public and four in the private sector.

Descriptive data in Table 4.35 show the proactive role of LIS professionals in these universities in lauding their voices to the higher authorities regarding increase in library budgets. The data also demonstrates that 11(73%) LIS professionals in the public and 2(22.2%) in the private sectors, total 13(87%) raise their voices to the authorities to increase the proportionate of existing library budgets. A majority 11(42.3%) LIS professionals

mentioned in Table 4.36 demanded an exceeded budget of more than 50% followed by 8(31%) and 3(12%) who demanded up to 50% and 20% increase respectively in their existing library budgets.

The overall analyses show an unstable position of library budgets which would have ultimately left an adverse effect on the collection development and management policies and procedures of the university libraries of KPK.

Table 4.33

Frequency Distribution of Regularly of Budget for Libraries in the Universities

S.No	Regularity of Budget	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	10	59	4	44	14	54
2.	No	7	41.2	5	56	12	46
	Total	17		9		26	

Table 4.34

Frequency Distribution of Increase in the Budget Allocation on Annual Basis by the University Authorities

S.No	Budget Increase Status	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	5	29	5	55	10	38.4
2.	No	11	71	4	44	15	58
	Total	17		9		25	

Table 4.35

*Frequency Distribution of Voicing Concern to the Higher Authorities Regarding Library**Budget Increase (n=15)*

S.No	Lauding Voices for budget increase	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Professionals who laud their concerns to the authorities	11	73	2	22.2	13	87
2.	Professionals who did not raised their concerns	-	-	1	11.1	2	13
3.	Neutral professionals	-	-	1	11.1	1	7

Table 4.36

Frequency Distribution of Proposed Increase in the Existing Library Budget

S.No	Proposed increased	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	10 to 20%	1	5.9	2	22.2	3	12
2.	21 to 30%	-	-	-	-	-	-
3.	31 to 40	-	-	-	-	-	-
4.	41 to 50%	4	23.5	4	44.4	8	31
5.	51 and above	8	47.1	3	33.3	11	42.3

4.7.2 Library Securities

Library and information science professionals were asked to provide data about library securities, collected from the users for collection building and other similar activities.

It was noted that out of 26 libraries only nine collect securities for library collection development. However, the amount collected under this head (library securities) varied from library to library and university to university. Five out of nine universities collect more than half million on annual basis followed by two universities each mentioned the range of library securities between 2 to 4 and 4 to 6 lacs respectively.

During the interviews and informal discussion held with the LIS professionals, it was noted that the amount collected under the library security heads from users were refundable in most of the cases. Hence, reflects little or no role and impact of library securities on the collection development and management of university libraries of KPK.

Table 4.37

Frequency Distribution of Library Securities (n=9)

S.No	Amount Collected Under Library Securities	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	200,000 to 400,000	1	11	1	11	2	22
2.	400,000 to 600,000	1	11	1	11	2	22
3.	600,000 and above	4	44	1	11	5	56
Total		6		3		9	

4.7.3 Allocated Budget for Different Forms/Types of Reading Materials in the University Libraries

Finally, libraries were asked to mention how much of their budget is spent on monographs (including approval plans and purchase of e-books), subscription including (print and electronic journals, databases and subscription of e-books) and A/V materials.

Data in Table 4.38 illustrates that majority of the universities spend more than 50% of their materials budget on the purchase of books reported by 12(71%) libraries. Nine universities reported that they spend up to 20% material budget on the subscription of different journals. The details of materials budget allocation for the purchase and subscription of monograph, journals, e-books, e-journals, databases and A/V materials is provided in Table 4.38.

Table 4.38

Frequency Distribution of Allocated Budget for Different Reading Materials in the Libraries

S.No	Titles	10 to 20	21 to 30	31 to 40	41 to 50	50 % &	N
		%	%	%	%	above	
1.	Books	2(12)	-	-	3(18)	12(71)	17
2.	Journals	9(53)	2(12)		4(24)	1(6)	16
3.	E-books	2(12)	-	-	-	1(6)	3
4.	E-journals	2(12)	1(6)	-	-	1(6)	4
5.	Databases	4(24)	-	-	-	1(6)	5
6.	A/V materials	3(18)	-	-	-	1(6)	4

Note: Multiple options were permitted

4.8 Bibliographic Access and Physical Preparation

Bibliographic access represents the whole apparatus of access to records of all kinds (textual, numerical, visual, musical, etc.), in all kinds of storage media (books, journals, microform, computer storage, disks, and so on). It includes three central things i.e. identification, location and physical as well as electronic access to documents. In this section LIS professionals were asked to mention professional staff i.e. classifiers and cataloguers responsible for classification, cataloguing and physical preparation and providing bibliographic access to documents. Information was also sought on the prevailing procedure of access to physical, digital and electronic resources in the university libraries of the province.

Data in Table 4.39 illustrates that majority of the public 10(86%) and private 5(56%) sector universities had appointed classifiers and cataloguers in their central libraries for the physical preparation (classification, cataloguing, spine labelling etc.) of library materials and providing bibliographic access facilities. Out of 26, 11 libraries reported that they do not have designated staff for the same purpose which is usually done by the library staff parallel to their other/routine assignments and in addition to their own duties.

All public and private sector university libraries in KPK are providing access to library materials in traditional ways. Table 4.40 also provides data about the fast growing shift of universities towards electronic and digital resources. A total of 20(77%) libraries reported that they provide access to digital and electronic resources to their users' community. Only 6 universities reported that they are still maintaining their traditional collections and have no access to either electronic or digital resources.

During interviews with the LIS professionals, researcher found that libraries providing access to electronic and digital resources, in most of the cases, avail this facility, via HEC Digital Library.

Table 4.39

Frequency Distribution of Professional staff/Classifiers and Cataloguers in the Universities

S.No	Cataloguers and Classifiers	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	10	59	5	56	15	58
2.	No	7	41	4	44	11	42
Total		17		9		26	

Table 4.40

Frequency Distribution of University Libraries Providing Access to Digital and Electronic Information Resources

S.No	Access to Digital and Electronic Resources	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	13	76.5	7	77.8	20	77
2.	No	4	23.5	2	22.2	6	23
Total		17		9		26	

4.8.1 Access Points to Electronic and Digital Resources

To know about the status of provision of electronic and digital resources including (e-book, e-journals, e-databases, open access to e-books and e-journals and websites) in the public and private sector universities, LIS professionals were asked to mention the access points where user access these resources. Data in Tables 4.41 and 4.42 show that most of the libraries both in public and private sectors provide on-campus access to electronic and

digital resources via institutional designated Internet Protocol (IP) Addresses, mentioned by 18 libraries (Public =12) and (Private = 6) libraries respectively.

The provision of remote access to electronic and digital resources was reported by four public and one private sector university libraries. It was also noted that two public and three private sector university libraries provide and manage user accounts for accessing their electronic and digital resources.

The analyses of the data show that electronic and digital resources represent increasingly important parts of collection building activities of the university libraries of KPK. A positive impact of HEC Digital Library on the traditional collection development and management policies and procedures of the university libraries can also be observed. The trend towards technological developments seem to have significantly transformed traditional collection development activities in the university libraries of the province into hybrid one. Furthermore, the adoption of electronic and digital resources would help these libraries to overcome the limitation of physical collection and supplement them to save users' time, stimulate research and ultimately improve their position in the research based ranking system of HEC.

Table 4.41

Frequency Distribution of Access Points to Electronic Materials in the Public Sector Universities

S. No	Access Points	Electronic Resources						
		N	E-Books	E-Journals	E-Databases	Open access e-book	Open access e-journals	Internet websites
1.	On campus via internet	12	12	12(71%)	12(71%)	12(71%)	12(71%)	12(71%)

	protocol address only		(71%)					
2.	Remote access (accessible from anywhere by the members)	4	2(12%)	2(12%)	2(12%)	2(12%)	2(12%)	2(12%)
3.	Remote access for browsing by any one via internet (non-members)	-	-	-	-	-	-	-
4.	Users can access through registered accounts	2	2(2%)	1(6%)	1(6%)	1(6%)	1(6%)	1(6%)

Note: Multiple options were permitted

Table 4.42

Frequency Distribution of Access Points to Electronic Materials in the Public Sector

Universities

S. No	Access Points	Electronic Resources						
		N	E-Books	E-Journals	E-Databases	Open access e-book	Open access e-journals	Internet websites
1.	On campus via internet protocol address only	6	6(67%)	6(67%)	6(67%)	6(67%)	6(67%)	6(67%)
2.	Remote access (accessible from anywhere by the members)	1	1(11%)	1(11%)	1(11%)	1(11%)	1(11%)	1(11%)
3.	Remote access for browsing by any one via internet (non-	-	-	-	-	-	-	-

members)

4.	Users can access through registered accounts	3	2(22%)	2(22%)	2(22%)	2(22%)	2(22%)	3(33%)
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Note: Multiple options were permitted

4.9 Promoting the Collection to Users

Marketing of the library, its collection, and its services has not always been a focal point for professional librarians but today they can accomplish this task much more easily than in the past through library and institutional webpages, newsletters, inexpensive giveaways, exhibitions, educational outreach, press releases, and public service announcements as well as displays and library publications (Gregory, 2011). Fry (2009) states that marketing has become an important element in the academic library field. The main aim of collection promotion at any academic university is to educate the users' community about the potentials of library collection.

The results of needs assessment of the users' community indicate their demands (what do they want?). However, simply buying materials for the users according to their needs is not enough; libraries must promote the new as well as old resources. Mathews (2009) urges LIS professionals to adopt effective methods to promote library collections and services.

In Pakistan local literature depicts low use of HEC Digital Library which is not used as often as the physical library. This indicates lack of promotion strategies to promote the resources of HEC Digital Library.

Knowing what the needs of user community are and letting them know about library's collection and services is most important in the university libraries. In the process of CM the next most important step after needs assessment is getting people into the library to make them potential users.

Library and information science professionals working in the university libraries of KPK were asked about the marketing strategies, they adopted for the promotion of library collection and services. To assist LIS professionals in their choices, a list containing both traditional and latest techniques of library's collection and service marketing were provided to them.

The analyses of the answers in Table 4.43 demonstrate that most of the university libraries promote collection and service through orientation programs in the library, which was mentioned by 18(69.2%) professionals. Sending/dispatching/circulating the lists of new arrivals to the respective departments for display on notice boards was the next most popular way of promoting library collections in the universities of KPK, mentioned by 15(58%) professionals. Nineteen per cent libraries use university publications for marketing library sources and services i.e. students' newspapers and newsletters etc. Nine (35%) libraries promote their collection through display of lists of new arrival on the main entrance followed by 3(12%) universities where information about library holdings is provided through table top displays at different university events.

The Data further illustrate the application of modern techniques and technologies including the usage of institutional websites, library webpages, email alerts and applications of social media for the promotion of library collection and services. Five universities, only in the public sector provide information about library collection and services on the institutional websites followed by two universities where the same information is provided independently on libraries webpages. Four universities reported email alert services followed by 2(8%) where information about library collection and services are provided and shared with the students and faculty members through social media (Facebook etc.).

The overall analyses of the data in Table 4.43 illustrate that university libraries are still using traditional methods of marketing for the promotion of collection and services.

However, a trend towards the adoption of modern technologies and applications also seemed to have taken place. Though, a slight proportionate of universities reported the use of these applications but still an unseen change is gradually taking place. It also appeared that universities are passing through a transitional stage which indicates the adoption of modern trends for collection promotion and services in future.

Table 4.43

Frequency Distribution of Promotion Strategies Adopted for Marketing by University

Libraries

S.No	Type of Promotion Strategies Adopted	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Information about library materials is provided in the library through orientation programs inviting students and faculty members.	11	65	7	78	18	69.2
2.	List of new arrival are displayed on the main entrance of the library.	7	41.2	2	22.2	9	35
3.	List of new arrivals are sent to the respective departments for display on their notice boards.	11	65	4	44.4	15	58
4.	Information about library holdings is provided through table top displays at university events	2	12	1	11.1	3	12
5.	Information about library holdings is provided through posters and giveaways in the university	1	6	0	0	1	4
6.	University publications are used for marketing	5	29.4	0	0	5	19.2

library sources and services i.e. students'						
newspapers and newsletters etc.						
7. Information about new materials are uploaded on university websites	5	29.4	0	0	5	19.2
8. Information about new materials are uploaded on library website	2	12	0	0	2	8
9. Information is sent to all students and faculty members via email alerts.	4	24	0	0	4	15.3
10. Information are shared via groups on social media i.e. Facebook, tweeter accounts etc.	1	6	1	11.1	2	8

Note: Multiple options were permitted

4.10 Evaluation of the Collection

Evaluation of the collection is a central component of collection development policies and procedures. It is an indicator of the collection of a library which determines value of the available resources and forecasts future demands. The study of library literature shows that many authors like Johnson, 2014, Evans and Saponaro, 2012 and Clayton and Gorman, 2002 etc. recommend the periodical evaluation of collection in libraries. Because, it helps academic libraries to ensure inclusion of the materials most needed for students, faculty and scholars.

Library literature demonstrates numerous methods for the evaluation of traditional and electronic resources. However, those methods which are commonly adopted and locally understood yield effective results. This study, on the basis of literature review made an effort to collect locally applicable, applied and understood methods of needs assessment. These include; circulation statistics (frequency of usage of particular items), title count (physical verification), age of the items (median age of items in the collection), shelf

observation by subject expert in the field, check list, interlibrary loan requests, and user surveys for traditional materials, network analysis, webpage hits and statistics provided by vendors for the assessment of electronic resources.

The results show that out of 26 libraries, 16 (62%) carry out evaluation of their libraries' collection.

4.10.1 Evaluation of Traditional Collection

Data in Table 4.44 show that in the case of traditional materials, most 16 (62%) university libraries evaluate their traditional collection with the help of circulation statistics followed by physically verifying material through title count, reported by 11(42.3%) libraries. Shelf observation by subject experts was reported by 7(27) libraries followed by 4 libraries where library holdings are checked against standard bibliographic lists.

It generally appeared that university libraries in KPK carry out evaluation of traditional collection in some way. Though, the culture of evaluation of physical collection seemed less developed in the university libraries of the province. However, there appears to be a tendency of LIS professionals toward the sensitivity of this issue.

Table 4.44

Frequency Distribution of Methods Employed for Evaluating Physical Library Collections

S.No	Methods	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1	Circulation Statistics	11	65	5	56	16	62
2	Title Count	8	47.1	3	33.3	11	42.3
3	Median age of the items in the collection within the categories	0	0	0	0	0	0

4	Shelf observation by the subject experts	5	29.4	2	22.2	7	27
5	Holding checked against standard bibliographic lists	1	5.9	3	33.3	4	15.3
6	Interlibrary loan requests	0	0	0	0	0	0
7	Users' survey	1	6	0	0	1	4
8	Any other	2	12	0	0	2	8

Note: Multiple options were permitted

4.10.2 Evaluation of Electronic Collection

It was noted that a small number of university libraries were engaged in the evaluation of electronic collection. Data in Table 4.45 illustrates that 6(23%) university libraries conduct users' surveys followed by 5(19.2%) libraries, conducting network usage analysis. Three (12%) university libraries in the public sector reported obtaining statistical data about the usage of electronic resources from the vendors. Webpages and database hits, searches and printing record were reported by 1 university library for assessing electronic collection.

The analyses of data in Table 4.45 show dependency of LIS professionals on the feedbacks, provided either by users, web, network or vendors respectively. In traditional methods they hold expertise and skills to consider an item's retention in the library stock or otherwise. The evaluation of electronic resources seems to be a less developed sector in the university libraries of KPK.

Table 4.45

Frequency Distribution of Methods Employed for Assessing Electronic Library Collection

S.No	Methods	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1	Users' Surveys	3	17.6	3	33.3	6	23
2	Network usage analysis	1	5.9	4	44.4	5	19.2
3	Web pages and database hits, searches and printing record	1	5.9	0	0	1	4
4	Vendors provide statistics about an electronic source usage	3	17.6	0	0	3	12

Note: Multiple options were permitted

The overall analyses show that the methods of evaluation of traditional and electronic resources vary from library to library and university to university. It also appeared that evaluation of traditional and electronic resources is a less developed activity in the university libraries of KPK. Circulation statistic seemed to be a valuable evaluation tool of collection in the university libraries which involves looking at the number of times that particular items have been checked out within a given time period. This is perhaps that circulation statistics can inform collection development librarian about the importance of a specific subject area or titles in a particular subject.

4.11 Weeding (De-selection)

It is generally believed that every library must be engaged in weeding to keep the collection in good shape for users. In spite of much advocacy by prominent authors like Evan and Saponaro (2012 & 2005) and Johnson (2014 & 2009) on the subject, university

librarians avoid weeding in order to avoid controversies from faculty and administration. It is evident from the literature that the importance of evaluation of print and electronic resources is gradually taking place in the developing countries. The main reason for this is the accountability of university libraries to their parent institutions.

In response to the question about written policy for weeding, thirteen public and nine private sectors universities responded to this question, four did not reply. Ten (38.4%) universities reported the possession of written weeding policies in their libraries whereas 12 (46.1%) replied in negative.

Table 4.46

Frequency Distribution of Written Policies for Weeding in the University Libraries

S.No	Weeding Policy	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	8	47.1	2	22.2	10	38.4
2.	No	5	29.4	7	77.8	12	46.1
	Total	13		9		22	

4.11.1 University Libraries Engaged in Weeding

Out of 26 libraries, 12 (46%) reported to be engaged in weeding at a minimal level. The rest of university libraries were not weeding their library materials. University libraries were also asked to mention the methods they use to determine materials for weeding. Data in Table 4.48 illustrates that circulation statistics has been the most popular and common determinant of indicating materials for weeding. Out of 12 university libraries, engaged in weeding, 10(83%) collect statistical data about library materials to be weeded out from circulation disks. Determining the age of the items (books and journals) in the collection within the categories (subject groups) was the next most popular method of indicating

materials for weeding purpose, reported by 9(73%) university libraries. The study also indicated that for the purpose of weeding library materials, the services of subject experts to conduct shelf observations surveys are acquired by 8(67%) university libraries in KPK following by studying historical data of library materials. Conducting comprehensive surveys to determine library materials for weeding purpose seem to be a less adopted technique among the university libraries of KPK.

Table 4.47

Frequency Distribution of University Libraries Engaged in Weeding

S.No	Carry Out Weeding	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Yes	8	47	4	44.4	12	46
2.	No	9	53	5	55.5	14	54
	Total	17		9		26	

Table 4.48

Frequency Distribution of Determining Type of Materials for Weeding (N=12)

S.No	Determining Factors	Sector					
		Public (N=8)		Private (N=4)		Aggregate	
		N	%	N	%	N	%
1.	From Circulation statistics	8	100	2	50	10	83
2.	Studying historical data of collection	2	25	4	100	6	50
3.	Age of the items in the collection within the categories	7	88	2	50	9	75
4.	Shelf observation by the subject experts	6	75	2	50	8	67

5. Users' survey	2	25	1	25	3	25
6. Any other	1	13	0	0	1	8.3

Note: Multiple options were permitted

4.11.2 Purpose of Weeding

Weeding has been discussed time and again to be one of the most important ways to keep library resources up-to-date, stimulate circulation, save time and create space for the new arrivals. Since crowding makes library materials difficult to find while weeding reduce crowding, enhance appeal and improve the tendency of users to check more library collection. Weeding also provides the opportunity to make room for new technologies and formats in the academic libraries (Gregory, 2011).

Focusing on these important issues, the purpose of weeding library materials were asked from the LIS professionals of public and private sector universities. Descriptive statistics in Table 4.49 illustrates that weeding in the university libraries of KPK usually take place for the purpose of keeping resources up-to-date (12, 100%), saving space (12, 100%), making room for new materials (11, 92%) and saving time (10, 83.3%) respectively. Seven, (58.3%) libraries each from public and private sector reported conducting weeding for the purpose to respond to the community needs and interests and make room for new technologies and formats. To stimulate circulation, establish credibility and enhance appeal were reported by 6 each (50%) and 3(25%) university libraries.

The analyses of data show that most of the libraries have adopted weeding for the purpose to overcome space related issues i.e. exclusion of old editions of books by new ones. It was also noted that weeding does not only take place for printed formats, due to the absorption of technologies, format wise materials are also weeded out in the university libraries of KPK. The study observed an impact of technologies on different aspects of CM policies and procedures in the university libraries of KPK including weeding.

Table 4.49

Purpose of Weeding Materials in Libraries (N=12)

S.No	Purpose	Sector					
		Public (N=8)		Private (N=4)		Aggregate	
		N	%	N	%	N	%
1.	To keep the resources up to date	8	100	4	100	12	100
2.	To stimulate circulation	5	63	1	25	6	50
3.	To save space	8	100	4	100	12	100
4.	To save time	8	100	2	50	10	83.3
5.	To enhance appeal	3	38	0	0	3	25
6.	To establish credibility	6	75	0	0	6	50
7.	To respond to the community needs and interests	7	88	0	0	7	58.3
8.	To make room for new books	8	100	3	75	11	92
9.	To make room for new technologies and formats	5	63	2	50	7	58.3

Note: Multiple options were permitted

4.11.3 Type of Materials Weeded Out in Universities Libraries

Those libraries involved in weeding provided information about the type of materials which are usually weeded out from their library stocks. Data in Table 4.50 present their responses with frequencies. It shows that majority of the libraries weed out old editions and those books which are stolen from the library stocks. The data indicate a mix of different issues due to which university libraries in KPK conduct weeding. Damaged and worn out books are weeded out by 10(83.3%) university libraries followed by those materials which are contrary and are of no use to the needs of the users' community, reported by 9(75%)

libraries. Those materials which are of no literary or scientific merit and factually inaccurate are weeded out by each 4(33.3%) university libraries, both in public and private sectors.

The materials easily obtainable from another library received no score which again ascertains lack of cooperation among the university libraries of KPK with in and across public and private sectors.

Table 4.50

Frequency Distribution of Type of Materials Usually Weeded Out (N=12)

S.No	Type of Materials	Sector					
		Public (N=8)		Private (N=4)		Aggregate	
		N	%	N	%	N	%
1.	Factually inaccurate	2	25	2	50	4	33.3
2.	Old editions	8	100	4	100	12	100
3.	Book theft	8	100	4	100	12	100
4.	Damaged worn beyond mending or rebinding	8	100	2	50	10	83.3
5.	Replaced by a new edition	5	63	1	25	6	50
6.	Of no literary or scientific merit	3	38	1	25	4	33.3
7.	Irrelevant to the needs and interest of the library's community	7	88	2	50	9	75
8.	The material is easily obtainable from another library	0	0	0	0	0	0

Note: Multiple options were permitted

4.11.4 Issues and Problems in the Process of Weeding

There are many issues and problems which are encountered by LIS professionals in weeding library materials. The review of literature shows that in the process of collection

building much stress is given on the selection, acquisition, and maintenance of collection. However, for a quality collection building in academic libraries, the evaluation of collection and weeding is as important as selection and acquisition itself.

All LIS professionals were asked to identify issues and problems they face in the process of weeding of library materials. Table 4.51 demonstrates the responses supplied by LIS professionals. It illustrates that in majority of the cases the process of weeding in the university libraries get halt because of administrative issues with the university administration. Similarly, LIS professionals also pointed out the absence of weeding rules making them handicapped while weeding library materials. Out of 26, 22 (85%) reported lack of human resources followed by budget constraints mentioned by 19(73%) libraries.

The analyses of data show that the absence of weeding and the issues and problems encountered by those universities libraries engaged in weeding and those do not, seem to more administrative than other issues in the university libraries of KPK. The reason might be that administration honour the big number of books in their parent institutional libraries. The numbers are used in the accreditations standards of HEC and other affiliation granting institutions i.e. Pakistan Bar Council, Pakistan Pharmacy Council, and Pakistan Engineering Councils etc. as well as to mention them in the annual progress reports. Therefore, it appears that administrators in the universities of KPK are making their reliance seemingly on objective statistical numbers for decision making. This is how they might be preventing LIS professionals to conduct weeding in the libraries.

Rules provide guidelines in any kind of administration and protect an organization's objectives. The absence of weeding rules in the university libraries is also the biggest problem which curbs library administration from taking decisions independently. Similarly, human resources and budget are also required for any kind of healthy activity regarding collection development and management. Since, in the aftermath of budget cuts, all types of

appointments and recruitments have been banned in the universities of the province.

Therefore, these issues also seem to have placed an impact on the policies and procedures of CM in the university libraries of KPK.

Table 4.51

Frequency Distribution of Issues and Problems in Weeding (N=26)

S.No	Problems	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Administrative problems	17	100	9	100	26	100
2.	Absence of weeding rules	17	100	9	100	26	100
3.	Budget problems	14	82	5	56	19	73
4.	Staff problems	16	94	6	67	22	85

Note: Multiple options were permitted

4.12 Cooperative Collection Development (CCD) and Resource Sharing (RS)

The importance of cooperative collection development and resources sharing in a developing country like Pakistan cannot be overemphasized. Local literature depicts many studies stressing on the need of cooperative collection development and resource sharing programs in the country (Butt and Midrarullah, 2011, Ahmad, 2006, Ahmad, 2007, Ameen, 2008b; Ansari, 2005; Hanif, 2005, Khan, 2005, Mirza, 2005 etc.). However, the current scenario still indicates absence of cooperation among the university libraries of Pakistan. Though, we have entered into an electronic era where facilities exists to materialise this concept but even then the phenomenon of cooperative collection development and resource sharing has not been developed in Pakistan as yet.

To investigate the level of cooperative and resources sharing programs among the university libraries of KPK, they were asked to mention about their engagements in

cooperative collection development and resources sharing programs. Data in Table 4.52 demonstrates that only 3(18%) libraries in the public and 1(11%) library in the private sectors were engaged in resource sharing programs. This figure constitutes 15% of the whole population which on the hand means that 85% libraries are not engaged in any kind of cooperative and resource sharing programs. During interviews with LIS professionals it was noted that the level of resource sharing programs was limited to local level only and that too was restricted to the exchange of institutional journals, magazines and periodicals on reciprocal basis.

Table 4.52

Frequency Distribution of University Libraries Engaged in Cooperative Collection Development (CCD) and Resource Sharing Programs (RSP)(N=26)

S.No	CCD & RS	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Yes	3	18	1	11	4	15
2.	No	14	82	8	89	22	85
	Total	17		9		26	

4.13 Preservation and Conservation Strategies

4.13.1 Kinds of Preservation Strategies Adopted for Library Materials

There are several aspects to protect the collection including binding, microfilming, conservation treatment and more recently digitization. To find out about different kinds of preservation strategies adopted by the public and private sector university libraries of KPK, they were provided a list containing both traditional and latest methods of preservation strategies to mention. It was noted that majority of the libraries are still following traditional methods for the preservation of library materials. All public and private sector university

libraries mentioned that they used binding as a major preservation strategy for library collections.

The conservation treatment of library materials was mentioned by 8(31%) libraries. It is important to note that digitization of library materials received no score from the list. This seems to be a latest phenomenon for the university libraries of KPK and they have yet to adopt this strategy for the preservation of library materials.

Microfilming was mentioned by two public sector universities. Since two public sector university libraries in the province have rare books/manuscripts in their collection, namely University of Peshawar and Islamia College University, Peshawar. These universities are expected to have used this preservation strategy to microfilm their manuscript collection to protect them from misuse or mishandling. Four libraries reported other kinds of preservation strategies. During interviews with LIS professionals multiple answers were noted in this regard including tobacco leaves treatment, use of pesticides, and cleaning shelves with kerosene oil soaked cloths etc.

Table 4.53

Frequency Distribution of Kinds of Preservation Strategies Adopted for Library Materials

S.No	Preservation Strategies	Sector					
		Public (N=17)		Private (N=9)		Aggregate	
		N	%	N	%	N	%
1.	Binding	17	100	9	100	26	100
2.	Microfilming	2	12	0	0	2	8
3.	Conservation treatment	5	29.4	3	33.3	8	31
4.	Digitization	0	0	0	0	0	0
5.	Other	3	18	1	11.1	4	15.3

Note: Multiple options were permitted

4.13.2 Replacement of Lost Library Materials

Table 4.54 illustrates various kinds of replacement strategies adopted by the public and private sector university libraries of KPK. The analyses of the data identified by the research during interviews held with the LIS professionals show three levels of replacement of reading materials in the university libraries. In the first case if book(s) is/are lost by the user(s) then it is compulsory for the user(s) to replace the lost materials, either the same version/edition, if valuable or the new edition available in the market or as deemed appropriate by the library administration. In the second case if the lost book(s) is/are not available in the market then the users are charged with fines or finally can also make a photocopy from the already existing copies of the lost books.

Table 4.54

Frequency Distribution of Ways Adopted for the Replacement of Reading Materials

S.No	Replacement of Reading Materials	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Replacement of materials by new one	11	64.7	7	77.8	18	69.2
2.	Make a photocopy from the already existing copies of books	2	11.8	2	22.2	4	15.3
3.	Charge fines	13	76.5	3	33.3	16	61.5

Note: Multiple options were permitted

4.13.3 Type of Security Measures taken for Library and Collection

Library and information science professionals were asked about the types of security measures taken for library and collection. Table 4.55 indicates the responses of LIS professionals regarding this question. It was noted that for collection security, 25(96%) libraries had left only one door for exit and entrance for staff and students followed by the

installation of security cameras in the library building reported by 14(54%), LIS professionals. Twelve (46%) libraries mentioned the installation of grills on the windows of libraries. Security guards/ watchmen were employed by 11(42%) universities for the security of their libraries and collections. To ensure the security of libraries the same number of universities had installed security lights at night times. The use of electronic security system was also installed by 5(19%) libraries for collection security. The installation of door buzzers and alarms was mentioned by 3 (12%) libraries.

Table 4.55

Frequency Distribution of Type of Security Measures Taken for Libraries and Collections

S.No	Security Measures	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Installation of security cameras in the library	8	47.1	6	67	14	54
2.	Installation of electronic security system	4	24	1	11	5	19
3.	Installation of grills on the windows of the library	10	59	2	22	12	46
4.	There is only one door for exit and entrance for staff and students	17	100	8	89	25	96
5.	Have employed security guards after closing	9	26	2	22	11	42
6.	Have installed security lighting at night times	7	41.2	3	33	11	42
7.	Door buzzers and alarms are installed	3	18	0	0	3	12

Note: Multiple options were permitted

The analyses of the overall situation show a high concern of library administration towards the preservation and conservation of library materials. Though, limited and traditional but according to the local environment, necessary security measures have been taken for collections and library buildings.

4.14 Impact of ICT on CM

Review of literature shows that the emergence ICTs and exponential growth of online resources has placed an impact on the CM of libraries. Traditional CM procedures such as manual selection of books and other reading materials from catalogues, reviews and visiting bookshops, their acquisition, both from local and foreign markets, inactive collection development policies which are never communicated to the persons responsible for selection and other co-associated procedures make the whole process of collection development slow and causes delay in the acquisition of materials. Kasalu and Ojiambo (2012) state, that the applications of ICT in collection development enhance the process and reduce the challenges of traditional collection development policies and procedures in the university libraries.

Based on the literature review, 22 points were provided to the university libraries to identify the impact of ICT on the CM policies and procedures of their libraries. This also aimed at identifying the perceptions of university LIS professionals regarding the effectiveness of ICT on the policies and procedures of traditional CM activities. All options received random responses from the LIS professionals.

Fifteen libraries (58%) each mentioned positive impact of ICT on the users' community, library staff and issues of financial management. They also reported that ICT has brought revolutionary changes in the provision of library and information services at global level. Data in Table 4.55 also illustrates that 14 libraries consider the applications of

ICT useful in the evaluation of collection and preservation. They also mentioned that ICT applications have controlled book theft in libraries. Thirteen libraries reported its good impact on the selection and acquisition of library materials and facilitation in the job responsibilities of LIS professionals in the university libraries. They also considered the applications of ICT useful in the construction/formulation of online public access catalogue (OPAC) in the university libraries because it provides the facilities to initiate such kinds of cooperative activities. Twelve libraries mentioned its effectiveness on the instant delivery of information to the users followed by the solution of management problems and copyright and licensing issues of documents in the libraries. The satisfaction of multidimensional information needs of users than print sources, remote searching facilities and the attraction of electronic resources due to budget cuts on the university libraries was reported by each 10 libraries. Nine university libraries mentioned ICT's important role in the formulation of uniform CM policies and the development of consortiums at local level.

The analyses of data show penetration of ICT in the CM policies and procedures of the university libraries of KPK. It also shows an impact on their traditional collection development activities. It was also noted that LIS professionals were aware of ICT applications and its usefulness in various CM activities. The application of ICT in the collection development activities can effectively meet the changing users' information needs and use the available financial resources more effectively. Therefore, ICT needs to be applied in the policies and procedures of CM in the university libraries of KPK. These results reflect that ICT has become an integral part of academic communities in Pakistan.

Table 4.56

Frequency Distribution of the Impact of ICT on CM

S.No.	Type of impact on CM	Sector						Chi Square & Sig
		Public		Private		Aggregate		
		N	%	N	%	N	%	
1.	Helps in assessing users' needs through online surveys	10	58.8	5	55.6	15	58	($\chi^2=.026$, sig=.873)
2.	Helps in the marking of library resources to users instantly	9	52.9	3	33.3	12	46.1	($\chi^2=.910$, sig=.340)
3.	Has supplemented print resources	7	41.2	1	11.1	8	31	($\chi^2=2.497$, sig=.114*)
4.	Has placed a positive impact on the budget and financial management of library	12	70.6	3	33.3	15	58	($\chi^2=1.762$, sig=.184*)
5.	Helps in the selection of materials with lots of selection options at one time	11	64.7	2	22.2	13	50	($\chi^2=4.248^*$, sig=.039)
6.	Assists the acquisition of library materials	10	58.8	3	33.3	13	50	($\chi^2=1.529$, sig=.216)

through online orders							
7. Helps in the formation of online public assess union catalogue	10	58.8	3	33.3	13	50	($\chi^2=1.529$, sig=.216)
8. Has resolved management problems in the library	8	47.1	3	33.3	11	42.3	($\chi^2=.454$, sig=.500)
9. Helps in providing bibliographic asses to users in a convenient way	9	52.9	4	44.4	13	50	($\chi^2=.170$, sig=.680)
10. Helps the remote searching of the library collection	9	52.9	1	11.1	10	38.4	($\chi^2=4.350^*$, sig=.037)
11. Helps in the physical preparation of library holdings	6	35.3	4	44.4	10	38.4	($\chi^2=.208$, sig=.648)
12. Has a major role in the formulation of local consortium among the libraries	7	41.2	2	22.2	9	35	($\chi^2=2.497$, sig=.116)
13. Saves time of the	11	64.7	4	44.4	15	58	($\chi^2=.990$,

readers as well as							sig=.332)
library staff							
14. Has reduced the	10	58.8	3	33.3	13	50	($\chi^2=1.529$,
cumbersome job of							sig=.216)
library professionals							
15. Helps in the	9	52.9	5	55.5	14	54	($\chi^2=.016$,
preservation of library							sig=.829)
holdings							
16. Helps in the evaluation	11	64.7	4	44.4	14	54	($\chi^2=.990$,
of collection and							sig=.320)
weeding							
17. Budget cuts have made	8	47.1	2	22.2	10	38.4	($\chi^2=1.534$,
e-resources more							sig=.216)
appealing							
18. It helps in the	7	41.2	2	22.2	9	35	($\chi^2=1.159$,
formulation of a							sig=.282)
uniform CM policy							
19. Solved copyright and	7	41.2	4	44.4	11	42.3	($\chi^2=.026$,
licensing problems							sig=.873)
20. Satisfy the	7	41.2	3	33.3	10	38.4	($\chi^2=.153$,
multidimensional							sig=.696)
information needs of							

users than print sources

21. Helps the library to control theft	9	52.9	5	55.5	14	54	($\chi^2=.016$, sig=.899)
22. Has changed library and information services globally.	11	64.7	4	44.4	15	58	($\chi^2=.990$, sig=.320)

Note: Multiple options were permitted

The values of Chi square in Table 4.55 represent the impact of ICT on the CM activities of public and private sector universities in KPK. These results i.e. ICT helps in the remote searching of the library collection ($\chi^2=4.350$, sig=.037*) and selection of materials with lots of selection options at one time ($\chi^2=4.248$, sig=.039*), supplemented print resources ($\chi^2=2.497$, sig=.114*) and place a positive impact on the budget and financial management of library ($\chi^2=2.497$, sig=.114*), assistance in the acquisition of library materials through online orders ($\chi^2=1.529$, sig=.216), the formation of online public assess union catalogue ($\chi^2=1.529$, sig=.216), formulation of local consortium among the libraries ($\chi^2=2.497$, sig=.116), reduced the cumbersome job of library professionals ($\chi^2=1.529$, sig=.216), budget cuts making e-resources more appealing ($\chi^2=1.534$, sig=.216), and helps in the formulation of a uniform CM policy ($\chi^2=1.159$, sig=.282), are significantly different.

It shows the impact of ICT on the various CM activities like selection, acquisition, access, financial issues, consortial planning, administrative responsibilities of the library staff, and CM polices is higher in the universities of KPK.

4.15 Impact of HEC Digital Library on CM

Digital libraries are crucial for disseminating knowledge and need of time for developing nation like Pakistan especially in the era of economic crunches (Midrarullah

and Shafiullah, 2011). Realizing the needs of the current scientific literature in universities and special libraries the Government of Pakistan has taken a good initiative by launching National Digital Library programme in 2004. This programme aimed at promoting research culture in the universities of Pakistan. HEC Digital Library provide access to latest peer reviewed international journals, databases, articles, and other materials like e-books, e-journals, e-theses through HEC website to the member libraries. Access to the resources is online, and has predominantly been set up though IP verification , allowing users within in institutions to be authenticated automatically for easy access to from any terminal on their local area network. Around 50,000 online books in addition to more than 23,000 journals are available through this programme. HEC Digital Library has accelerated the research activities and output in the universities of Pakistan (Raufullah, 2010).

University libraries in KPK were asked to mention the impact of HEC Digital Library on their CM policies and procedures. Data in Table 4.56 present the impact of HEC Digital Library on the policies and procedures of CM in the university libraries of KPK. It seems that HEC Digital Library has placed a high impact on the traditional policies and procedures of CM in the university libraries of KPK. Out of 26, 19 universities mentioned that HEC Digital Library serves multidiscipline at one place and time and has resolved space issues in their libraries. Eighteen (69%), university libraries in both public and private sector reported that HEC Digital Library has solved their problems of materials selection, acquisition and financial issues respectively. Fifteen libraries reported that it has reduced library staffs burdens and provides state of the art latest information to the user community in the form of books and journals than provided by print materials. Intellectual Property Rights (IPR) and related issues are major challenge of digital libraries however; data in Table 4.56 show that this issue has been resolved by the HEC Digital Library. Fourteen university libraries mentioned that access to HEC Digital Library has solved legal and

licensing problems of electronic materials. Thirteen universities reported that HEC Digital Library provides speedy access to information of all disciplines which has stimulated research activities in the universities. These libraries also reported that HEC Digital Library has solved preservation and weeding problems in the libraries. Since, HEC Digital Library provides access to electronic resources to all public and private sector universities and Degree awarding institutions; therefore, it has created a virtual platform for cooperation among the university libraries. Eleven libraries reported that HEC Digital Library has boosted their cooperative activities.

The overall analyses show that HEC Digital Library has placed a good impact on the traditional policies and procedure of CM in the university libraries of KPK. The impact on CM can be listed as follow;

1. Improved the use of electronic resources
2. Resolved the issues of selection and acquisition of library materials
3. Helped the university libraries by stimulating research despite financial constraints
4. Brought the library on the fingertips of the users which is not possible in a traditional way
5. Ensured preservation and conservation of library materials
6. Supplemented the print resources
7. Solved the myths and realities of digital collection
8. Serves multidiscipline at one place and time
9. Provides spontaneous access to high quality, reliable up to date information to the users of all disciplines
10. Reduced library staff burdens
11. Solved space problems in libraries
12. Ensured the establishment of Resources sharing and collaborative programs

13. Provides marketing strategies

14. The solution of the problems of Intellectual Property Rights (IPR) and related issues

Table 4.57

Frequency Distribution of the Impact of HEC Digital Library on CM

S.No.	Type of Impact on CM	Sector						Chi Square & Sig
		Public		Private		Aggregate		
		N	%	N	%	N	%	
1.	Has reduced the problems of selection	11	65	7	78	18	69	($\chi^2=1.534$, sig=.216)
2.	Has reduced the problems of acquisition	12	71	6	67	18	69	($\chi^2=.042$, sig=.837)
3.	Has solved financial problems of library and university	13	77	5	56	18	69	($\chi^2=.1.208$, sig=.272)
4.	Provides state of the art latest information to the user community in the form of books and journals than provided by print materials	12	71	3	33	15	58	($\chi^2=3.346$, sig=.067*)
5.	Serves multidiscipline at one place and time	13	77	6	67	19	73	($\chi^2=.287$, sig=.592)
6.	It provides spontaneous information to the users of all	10	59	3	33	13	50	($\chi^2=3.172$, sig=.075*)

disciplines

7. Has stimulated research activities in the university	10	559	3	33	13	50	($\chi^2=1.529$, sig=.216)
8. Reduced library staff burdens	11	65	4	44	15	58	($\chi^2=.990$, sig=.320)
9. Have solved space problems in libraries	14	82	5	56	19	73	($\chi^2=2.148$, sig=.143)
10. Resources sharing has been boosted	8	47	3	33	11	42	($\chi^2=.454$, sig=.500)
11. Has solved legal and licensing problems of electronic materials	11	65	3	33	14	54	($\chi^2=3.346$, sig=.067*)
12. Has solved problems of preservation and weeding	8	47	5	56	13	50	($\chi^2=.170$, sig=.680)

Note: Multiple options were permitted

Regarding the impact of HEC Digital Library on the CM of university libraries of KPK, the values of chi square, that it provides state of the art latest information to the user community in the form of books and journals than provided by print materials ($\chi^2=3.346$, sig=.067*), spontaneous provision of information of all disciplines to the users ($\chi^2=3.172$, sig=.075*), and the solution of legal issues and licensing problems of electronic materials ($\chi^2=3.346$, sig=.067*) are significantly different. This indicates that these issues have been largely addressed with the help of HEC Digital Library in the universities of KPK.

4.15.1 Types of Problems Faced by LIS Professionals while Operating HEC Digital Library

There are problems which are faced by the LIS professionals while using HEC Digital Library which can affect its usefulness. All public and private sector universities provided data on these problems which is listed in Table 4.57. The most common problems appeared electricity failure/fluctuation/load shedding, lack of access to frequently used e-journals and e-books and archival materials, lack of training and need of more orientation, lack of online searching skills and low speed of internet. Apart from it lack of computer hardware, software facilities and its proper functioning was also mentioned by library professionals. Thirteen university libraries complained that access to HEC Digital Library is not provided to the students' hostels where majority of the students live. The same number of LIS professionals also mentioned that selection of HEC Digital resources is made independently without the involvement of library professionals which should be a joint venture. Eleven respondents mentioned that financial flow comes with stops and checks; which adversely affect library's online services.

The problems mentioned by LIS professionals of the public and private sector university libraries of KPK are valid. But it is good to have access to a tremendous digital collection of high quality through HEC Digital Library.

Table 4.58

Frequency Distribution of Type of Problems Faced Professional Librarians while Operating HEC Digital Library (N=26)

S.No	Type of impact on CM	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Lack of training/need more orientation	11	64.7	4	44.4	15	58

2. Lack of online searching skills	10	58.8	4	44.4	14	54
3. Have no access to archival issues	13	76.5	2	22.2	15	58
4. Low speed of internet connectivity	9	52.9	4	44.4	13	50
5. Electricity failure/fluctuation/load shedding	12	70.6	4	44.4	16	62
6. Databases are not users-friendly	5	29.4	1	11.1	6	23
7. Have not provided access to frequently used e-journals and e-books	12	70.6	4	44.4	16	61.4
8. Library professionals are not involved in the selection of e-resources	12	70.6	1	11.1	13	50
9. Lack of hardware facilities	6	35.3	1	11.1	7	27
10. New databases are not added on demand	10	58.8	0	0	10	38.4
11. Hardware is not frequently in functioning order	5	29.4	0	0	5	19.2
12. Hardware, software and internet connectivity is not provided to each and every department in the university (only provided to the central library)	6	35.3	0	0	6	23
13. Access is not provided to the students' hostels where majority of the students live	11	64.7	2	22.2	13	50
14. Financial flow comes with stops and checks; thus adversely affecting library's online services	10	58.8	1	11.1	11	42.3
15. Other	1	5.9	1	11.1	2	8

Note: Multiple options were permitted

Part II: Users' Satisfaction with the Policies and Procedures of CM in the University Libraries of KPK

This research aimed at finding the answers of the following five research questions which were framed to achieve the objectives of the study:

1. What are the policies of Collection Management (CM) adopted by the university libraries of Khyber Pakhtunkhwa (KPK), Pakistan?
2. What are the procedures of CM adopted by the university libraries of KPK?
3. What is the impact of ICT, electronic resources and HEC Digital Library on CM in the university libraries of KPK?
4. What are the main issues and challenges of CM in the university libraries of KPK?
5. What is the level of users' satisfaction with CM policies and procedures adhere to by the university libraries of KPK in fulfilling their information needs?

The first four research questions, framed to achieve the first three objectives of the study were put forward to the LIS professionals and educationalists. Their answers and opinions regarding CM policies, procedures, impact of ICT, electronic resources and HEC Digital Library on CM and issues and challenges of CM in the university libraries of KPK were obtained with the help of questionnaires and personal interviews. To obtain the forth objective of the study, academic community of the universities of KPK was approached for the purpose to know how much their libraries' CM policies and procedures are effective in fulfilling their learning, academic and research related needs. This objective was obtained by measuring their level of satisfaction with their libraries' CM policies and procedures through a survey questionnaire.

Two hundred and sixty (260) printed copies of questionnaires along with covering letters were sent to the target population by registered post along with self-addressed envelopes with postal stamps. Some questionnaires were also administered through e-mail

and personal visits. Many follow ups, emails, telephonic calls, personal contacts in the universities and researcher's personal visits to respondents' working places, hostels and residential areas made the achievement of 77% (200) response rate. The data was analyzed with the help of SPSS version 19 and are reported here.

The respondents of the study were the teaching faculty of the main campuses of all the public and private sector universities of KPK, who were purposively selected at the rate of 10 teachers per university, having a minimum of three years library usage experience, knowledge of HEC digital library, ICT applications and library activities.

The data were collected and analyzed on the pattern of the following sections;

Section 1: General information and respondents' Demographics: This section included general information regarding type of university (public or private), respondents' gender, and designation, age group and library usage experience.

Section 2: Assessing users' needs. In this section the level of satisfaction of faculty members from the employed methods of users' needs assessment were asked with further suggestions from them to improve the current methods and design more effective CM strategies and procedures.

Section 3: Collection development: In section three, questions regarding the effectiveness of collection development policies, procedures and library collections were asked. Respondents were also asked to suggest measures for improving the quality and utility of current collections of their respective university libraries.

Section 4: Organization of library collection: This section focused on the organization and access of library materials. An effort was also made to find out the most common problems which are faced by the teaching faculty while searching a piece of information (books, journals etc.) in their respective university libraries.

Section 5: Promotion of the library collection: Questions regarding the effectiveness of promotion strategies adopted for the marking of library collection were asked in section five. In this section it was also inquired from faculty members to mention their preferred methods to be adopted for effective collection promotion in their respective university libraries.

Section 6: Applications of ICT and access to HEC Digital Library: In section six, faculty members' satisfaction from the applications of ICT and access to HEC Digital Library was assessed. In this section measures for improving the applications of ICT and access to HEC Digital Library was also inquired from the faculty members to improve access to electronic and digital resources.

4a.1 General Information and Respondents' Demographics

The respondents were asked different questions related to their particulars i.e. gender, designation, age group and library usage experience. The results show that out of 200 respondents, 175 (87.5%) were male and 25 (12.5%) were female. The reason behind the low participation of female might be the social constraints of the province of KPK where in coeducation environment their participation is not accepted by the society.

One hundred and twenty seven (63.5%) responses were received from the public and 73 (36.5%) from private sector universities. The results show that response rate from the public sector universities (75%) is slightly higher than the private sector (70%). There might be the reason that in public sector universities faculty strength who participates in library related activities is higher than the private. In private sector the administration usually take charge of library related matters. Respondents were asked to specify their designations on which they work. It is important to note that most of the lecturers 85(43%) and assistant professors 80(40%) participated in the survey. The next category of high response was of associate professors 25(13%) followed by professors 10(5%). The analyses of the response

rate show that most of the junior teaching faculty members participated in the survey.

Whereas the ratio of participation of senior faculty member i.e. associate professors and professors is very low. The reason of this low response was their unavailability for the survey due to busy teaching and administrative schedules. This is why only few senior faculty members could be approached by the researcher for this survey (Table 4a.1).

The highest response was from age group of 36-40 (35%) followed by 31-35 (28%). The frequency distribution of other age categories is given in Table- 4a.2. Frequency distribution given in Table-3 shows that library usage experience of the respondents varied from 4 to more than 13 years. One hundred and twenty (60%) respondents had more than 13 years of library usage experience (Table 4a.3).

Table 4a.1

Frequency Distribution of Designation of the Respondents

S.No	Designation	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
4.	Lecturers	60	47.2	25	34.2	85	42.2
5.	Assistant Professors	41	32.2	39	53.4	80	40
6.	Associate Professors	18	14.1	7	9.5	25	12.5
7.	Professors	8	6.2	2	2.7	10	5
Total		127	100	73	100	200	100

Table 4a .2

Frequency Distribution of Age Group of the Respondents

S.No	Age Group	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	25 to 33	9	7	16	22	25	12.5
2.	31 to 35	43	34	13	18	56	28
3.	36 to 40	55	43.3	15	20.5	70	35
4.	41 to 45	14	11	13	18	27	13.5
5.	46 to 50	4	3.1	8	11	12	6
6.	51 and above	2	1.5	8	11	10	5
Total		127	100	73	100	200	100

Table 4a .3

Frequency Distribution of Respondents' Library Usage Experience

S.No	Experience	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	3years	0	0	0	0	0	0
2.	4 to 6 years	6	5	5	7	11	5.5
3.	7 to 9 years	7	5.5	7	9.5	14	7
4.	10 to 12 years	40	31.4	15	20.5	55	27.5
5.	13 years and above	74	58.2	46	63	120	60
Total		127	100	73	100	200	100

4a.2 Satisfaction with Users' Needs Assessment

Knowledge of the service community is the first key stone for effective collection development. The more the collection development staff knows about the work roles, general interests, education, information and communication behaviour, values of potential library users, the more likely it is that the collection will be able to provide the necessary information when it is needed (Gregory, 2011). Biblarz, Bosch and Surgnet (2001) define a needs assessment as “process of using one or more techniques to collect and analyze data regarding library users or potential users. Specially, the data collected will be directly or indirectly related to the needs, in the broadest sense, of users, or customers, for information in all formats. Interpretation of data will influence the management of collection”. Evans and Saponaro, (2005) propose that needs assessment of the community has to be done on a regular basis. Gregory (2006) suggests a traditional journalist's approach to writing a news story by asking who, what, when, where, constitutes an appropriate and easy to apply methodology for building a philosophically grounded collection needs assessment.

To assess needs of the users' community; library professionals' apply a variety of methods including surveys, study of syllabi, knowledge of teachers and researchers filed of specializations, current research projects in the universities, circulation statistics and interlibrary loans requests. In order to build an effective collection many library professionals also held discussions with heads/chairperson and students representatives.

Keeping in view these points to fore, academic community of the universities of KPK was asked to mention their level of satisfaction with the methods of users' needs assessment adopted by the information professionals for collection development. They were also asked to suggest which method of users' needs assessment they prefer for effective collection development in their universities. Their level of satisfaction and preferred methods of users' needs assessments are reported in Tables 4a.4 and 4a.5 respectively.

Frequency distribution in Table 4a.4 show that out of 200 respondents 132(66%) were satisfied to some extent. Only 30(15%) respondents showed their full satisfaction regarding users' needs assessment methods in their respective universities. It is very alarming to note that 38(19%) respondents showed their complete dissatisfaction regarding users' needs assessment methods in their universities.

The review of literature shows that the nature of information needs assessment is obvious when the service role of library and LIS professionals are considered. Academic institutions will continue to support their libraries only if they provide information relevant to the needs of the users' community. Results in Table 4a.4 show that the level of satisfaction of users is nearly on a continuum between satisfaction and dissatisfaction but more lopsided towards the later. In Pakistan, effective collection development is generally the main reason for conducting needs assessment projects. Therefore, LIS professionals should motivate information users to participate in users' needs assessment surveys by letting them know about its aims and objectives. Nonparticipation in the users' needs assessment projects, or worse yet, deliberately misleading responses, in case the objectives of the surveys are ambiguous or unknown, can create problems for the LIS professionals in building effective collection for the users.

Respondents were asked to mention their preferred methods of users' needs assessment projects. Results in Table 4a.5 show that majority 195(97.5%) faculty members suggested to the LIS professionals to hold discussions with the heads of departments and chairpersons followed by consulting syllabi 121(60.5%), study of faculty and research scholars' field of specializations 110(55%), conducting surveys 101(50.5%) and study of on-going research projects in the universities 90(45%) for effective collection development.

These results are concurrent with the finding of the qualitative and quantitative data analyses which indicated that more than 80% (21) universities apply assessment techniques

for collection development to support the academic, teaching and research needs of the users' community.

The analyses of data in Table 4a.5 also show that teaching faculty demand major participation in the process of collection development. Data in Table 4a.5 indicate those areas where teaching faculty keep a strong hold and influence collection development process in the university libraries of KPK.

Table 4a .4

Frequency Distribution of Respondents' Satisfaction with the Methods of Users' Needs Assessment Adopted for Collection Development and Management

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	12	9	18	25	30	15
2.	Satisfied to some extent	86	68	46	63	132	66
3.	Not satisfied	29	23	9	12	38	19
Total		127	100	73	100	200	100

Table 4a .5

Frequency Distribution of Respondents' Preferred/Recommended/Suggested Methods of Users' Needs Assessment for collection development and management

S.No	Suggestions	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Conduct surveys	65	51.1	36	49.3	101	50.5
2.	Consult syllabi	70	55.1	51	70	121	60.5

3. Study of faculty and research scholars' field of specializations	60	47.2	50	68.4	110	55
4. Discussions with the HoDs/Chairpersons	124	98	65	89	195	97.5
5. Study of on-going research projects	30	24	60	82.1	90	45

Note: Multiple options were permitted

4a.3 Satisfaction with Collection Development Policies and Procedures

The analyses of data in the previous section of this chapter show that there is a complete absence of collection development and management policies in the university libraries of KPK. It was also noted that in the absence of formal written collection development and management policies, most university libraries have some type of documents containing independent random procedures for selection, acquisition, and other library activities. The review of the relevant literature shows that collection development and management policies serve as bluebook for the operations of libraries. Johnson (2009) calls it library business plans which contain useful information and assist library professionals in decision making. It provides a framework to the information professionals within which they select and manage information resources according to the needs of the users' community. The level of satisfaction of users indicates the effectiveness of collection development policies and procedures in any academic institution. The more the collection development and management policies are effective, the more likely is that users will be satisfied.

Respondents were asked to rate the effectiveness of their university libraries' collection development policies and procedures in fulfilling their information needs. Data in Table 4a.6 show low level of satisfaction of respondents from the collection development policies and procedures, adopted by the university libraries of KPK for collection

development and management. Out of 200 respondents, only 30 (15%) were satisfied with their collection development policies and procedures. Almost a similar number of respondents 29(14.5) showed complete dissatisfaction regarding their collection development policies and procedures. On the other hand the amount of respondents who showed partial satisfaction regarding their collection development policies and procedures adopted for collection building was high. One hundred and forty one (70.5%) respondents mentioned that they were partially satisfied with their university libraries' collection development policies and procedures (Table 4a.6).

As noted in the first section of data analysis, the focus of collection development and management policies and procedures in the university libraries of KPK is more towards the academic side and that too to build an effective collection of information resources to fulfil the information needs of the users. Effective collection, that is built according to the information needs of the users is always a good indicator and shows the effective, operational and functional academic aspect of a good collection development and management policy. Keeping in view these points a specific questions regarding the effectiveness of the collection were asked from the respondents. Results in Table 4a.7 indicate that majority of the respondents were either fully 90(45%) and partially 80(40%) satisfied from their collection in fulfilling their information needs. Only 30(15%) respondents mentioned that their libraries' collection is effective in fulfilling their information needs effectively.

The level of satisfaction of respondents from collection development policies and procedures and library collection is similar which ascertains that a large number of respondents are not satisfied with the policies and procedures of collection development adopted for collection building in the university libraries of KPK. This would also mean that in the absence of proper collection development polices, university libraries in KPK are

unable to develop effective collection according to the information needs of the users. LIS professionals should take it serious because this situation would discourage library users and in other words may increase the number of nonusers if they do not recognize their needs properly. Similarly under such circumstances, if LIS professionals are unable to provide the right information to the right person at the right time and in the right format then they may lose their institutional support which is tied to the provision of best information services that users perceive useful and effective.

Respondents were also asked to give their suggestions for improving the quality and utility of collections (books, journals etc.) available in the university libraries of KPK. All respondents suggested that new and current information resources should be added on regular basis to the library collection and information literacy programs should be arranged for users' awareness about library collections and services. The preparation of computerized catalogued for searching library collection and resources were suggested by 196(98%) respondents. One hundred and sixty six (83%) respondents mentioned that cooperation from faculty and administration with LIS professionals in developing quality collection is indispensable. Collection evaluation was seen as an important measure for building quality collection by 152 (76%) respondents followed by the provision of adequate funding and dedication of LIS professionals' toward the provision of information service were suggested by 150(75%) and 128 (64%) respondents respectively. Proper technical processing including classification, cataloguing and spine labelling etc. of library collection were suggested by 78(39%) respondents (Table 4a.8).

Table 4a .6

Frequency Distribution of Respondents' Satisfaction with Collection Development Policies and Procedures

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	12	9.4	18	25	30	15
2.	Satisfied to some extent	95	75	46	63	141	70.5
3.	Not satisfied	20	16	9	12.3	29	14.5
Total		127	100	73	100	200	100

Table 4a .7

Frequency Distribution of Respondents' Satisfaction with Library Collections

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	13	8	17	23.2	30	15
2.	Satisfied to some extent	47	31	33	45.2	80	40
3.	Not satisfied	67	51	23	31.5	90	45
Total		127	100	73	100	200	100

Table 4a .8

Frequency Distribution of Respondents' Recommendations and Suggestions to Improve the Quality and Utility of Library Collection

S.No	Suggestions	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Collection evaluation on regular basis	102	80.3	50	68.4	152	76
2.	Information professionals' dedication toward their duties	80	63	48	66	128	64
3.	Cooperation from faculty and administration	120	94.4	46	63	166	83
4.	Arrangement of information literacy programs for the users	127	100	73	100	200	100
5.	Provision of adequate funds	120	94.4	30	41	150	75
6.	Technical processing of collection (classification, cataloguing etc.)	50	39.3	28	38.3	78	39
7.	Preparation of computerized catalogue	125	98.4	71	97.2	196	98
8.	Addition of new titles on regular bases	127	100	73	100	200	100

Note: Multiple options were permitted

4a.4 Satisfaction with the Organization of Library Collections

University libraries in Pakistan adopt different methods to organize information resources. Usually various editions of classification schemes and cataloguing rules are used to organize collection for the users' community. Materials are organized in different

physical locations based on their subject areas. Call numbers that are unique to information items help users to find them on the shelves. In the wake of new developments taking place in the libraries, LIS professionals also prepare computerized catalogues which serve as databases and search tools, containing record for each item that libraries own or subscribe.

Proper classification, cataloguing and organization of library collection save time of the users and help them to get the right bit of information at the right time, and in the right location. Keeping in view the importance of systematic organization of library collections and its impact on the information access, respondents were asked to mention their level of satisfaction. It was noted that most of them 92(46%) were not satisfied with the classification, cataloguing and physical arrangement of collection in their university libraries (Table 4a.9). Out of 200 respondents, 120(60%) reported that books and other reading materials are not organized and systematically arranged on shelves in their university libraries. Similarly 75(37.5%) respondents also mentioned that since library collections are not properly classified and catalogued in their university libraries, therefore, create access problems for them while browsing libraries' collections. The unavailability of computerized catalogues and library guides for searching library collection and users' assistance were reported by 93(46.5%) and 70(35%) respondents. Sixty one (30.5%) respondents also reported that spine label writings soon fade away due to which materials cannot be identified and accessed on shelves (Table 4a.10). These findings are further ratified by the results in Table 4a.11, where majority of the respondents 148(74%) showed their partial satisfaction followed by 31(15.5%) who were completely dissatisfied regarding the overall arrangements of their university libraries' collections.

To overcome these issues, LIS professionals should put their efforts to maintain books and other reading materials in proper order in their various sections systematically according to the specific nature of the collections. LIS professionals should raise their voice

to the authorities to appoint professional library guides who may hold a Master degree in Library and Information Science for users' assistance and genitors for collection arrangement on shelves according to the subject areas of collections.

Computers in libraries are most often used to gain access to the libraries' collection and electronic database. Computers usually allow searching the database for a book, journal or a piece of information within a book or journal. A computerized catalogue forms the base for most of the library activities such as reference, bibliographic information, recording and indexing the library materials. It helps library users to retrieve the required information easily and quickly. The study suggests the preparation of a computerized catalogue of the library materials for every university library which must be uploaded on library and university websites to assist users to have simultaneous access to library collections. . It will also reduce the cumbersome job of library staff of printing and writing on cards and their subsequent filling. Moreover, it will help to conserve space and stationary.

Table 4a .9

Frequency Distribution of Respondents' Satisfaction with the Organization of Library Collections

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	15	12	11	15	21	10.5
2.	Satisfied to some extent	57	45	30	41	87	43.5
3.	Not satisfied	55	43	32	44	92	46
Total		127	100	73	100	200	100

Table 4a .10

Frequency Distribution of Problems Faced by the Respondents While Using their Libraries' Collection

S.No	Main Issues and Problems	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Materials are not properly classified and catalogued which creates access problems	50	39.3	25	34.2	75	37.5
2.	Books and other reading materials are not placed in an organized and systematic manner on shelves	80	63	40	55	120	60
3.	Computerized catalogue is not available in the library for searching library collection	53	42	40	55	93	46.5
4.	Library guides are not available in the library for users assistance	50	39.3	20	27.3	70	35
5.	Spine label writings soon fade away due to which materials cannot be identified and accessed	41	32.2	20	27.3	61	30.5

Note: Multiple options were permitted

Table 4a .11

Frequency Distribution of Respondents' Satisfaction with the Overall Arrangement of University Libraries

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	11	9	10	13.5	21	10.5
2.	Satisfied to some extent	95	75	53	73	148	74
3.	Not satisfied	21	16	10	13.5	31	15.5
Total		127	100	73	100	200	100

4a.5 Satisfaction with the Promotion of Library Collections

Various researchers have advocated the concept of promotion of library collection and services to the users in the academic libraries (Gupta, 2003, Xia, 2009, Minami, 2010 etc.). Rapid developments in the field librarianship have compelled LIS professionals to promote information products and services. Dwindling budgets, increased users expectations, high rate of publications and their rising costs, consortial demands, and complexity in information requirements have also forced information professionals to adopt marketing to improve the management of library and information centres (Madhusudhan, 2008). What are the information needs of users and letting them know what is available in the library in the form of collection and services is most important in the university libraries. The next most important step after needs assessment in the process of CM is getting information users into the library to make them potential users. Though the concept of promotion of information products and services in the academic libraries of Pakistan is new, however, LIS professionals are producing literature on its importance both in theory and

practice. How do academic libraries in Pakistan market information services to a diverse community of users in an increasingly digital and complex environment has been the focus of many studies (Asghar, 2012, Asghar and Bhatti, 2012).

Respondents in the universities of KPK were as asked to mention their level of satisfaction about the marketing strategies, adopted by the LIS professionals for the promotion of library collection and services in their libraries. Results in Table 4a.12 show that majority 140(70%) of the respondents are partially satisfied regarding their university libraries collection promotion followed by 31 (15.5%) respondents who showed their complete dissatisfaction. Only 29(14.5%) respondents reported their complete satisfaction regarding collection promotion in their respective university libraries.

They were further asked to give their suggestions for the improvement of current situation. Majority 183(91.5%) of them suggested to the LIS professionals to arrange information literacy programs through inviting students and faculty members to central libraries followed by 172(86%) respondents who gave the same suggestion but with different locations i.e. arrangement of information literacy programs in the respective departments and institutes of the universities. One hundred and sixty nine (84.5%) respondents proposed that for wider publicity of collection, information about new materials should be uploaded on university websites so that it could be approached and browsed from anywhere. List of new arrivals should be sent to the respective departments of the universities for display on notice boards and on the main entrance of the central library were suggested by 165(82.5%) and 87(43.5%) respondents respectively. The use of, email alerts, university publications and social media for marketing library sources and services were suggested by 52(26%), 51(25.5%), and 43(21%) respondents respectively (Table 4a.13).

The analyses of the data show that respondents suggested mostly traditional strategies of promoting library collection to the users' community of the university libraries

of KPK. However, a trend towards the adoption of modern technologies and applications was also observed. Though, the IT infrastructure of university libraries in KPK is not that much developed, however, the best efforts made by HEC have enabled them to reap the benefits of the ICT revolution. This is why some of the respondents have suggested the use of ICT based facilities for the promotion of library and information products and services in the university libraries of KPK.

Table 4a .12

Frequency Distribution of Respondents' Satisfaction from the Promotion of Collection in the University Libraries

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	18	14.1	11	15	29	14.5
2.	Satisfied to some extent	87	68.5	53	73	140	70
3.	Not satisfied	22	17.3	9	12.3	31	15.5
Total		127	100	73	100	200	100

Table 4a .13

Frequency Distribution of Respondents' Recommendations and Suggestions to Improve the Quality and Utility of Library Collections

S.No	Suggestions	Sector					
		Public		Private		Aggregate	
		N	%	N	%	N	%
1.	Information about library materials should be provided in the library through information	121	92.2	62	85	183	91.5

literacy programs inviting students and faculty members to central libraries.							
2. List of new arrival should be displayed on the main entrance of the library.	57	45	30	41	87	43.5	
3. List of new arrivals should be sent to the respective departments for display on their notice boards.	109	86	56	77	165	82.5	
4. Information about library materials should be provided in the library through information literacy programs in their respective departments.	121	92.2	51	70	172	86	
5. University publications should be used for marketing library sources and services i.e. students' newspapers and newsletters etc.	23	18.1	28	83.3	51	25.5	
6. Information about new materials should be uploaded on university websites	106	83.4	63	86.3	169	84.5	
7. Information should be sent to all students and faculty members via email alerts.	27	21.2	25	34.2	52	26	
8. Information should be shared via groups on social media i.e. face book accounts etc.	15	12	28	38.3	43	21.5	

Note: Multiple options were permitted

4a.6 Satisfaction with the ICT Facilities and Access to HEC Digital Library

4a.6.1 ICT Facilities in the University Libraries

The advent of ICT and its applications has created an ever evolving environment in the university libraries of Pakistan. Despite bringing many challenges, this environment has

provided opportunities to the academic institutions in Pakistan to adopt global academic standards and develop their higher education system in line with the international standards (Bhatti, Chohan and Asghar, 2014). The applications of ICT in libraries have not only placed an impact on the CM activities of the university libraries, but has also influenced users' attitude towards accessing and retrieving the current, most relevant, valid and reliable information. Since its establishment in 2002, HEC is committed to develop the IT infrastructure of universities in Pakistan in order to them to obtain the benefits of the ICT. HEC also provides financial support to the universities for computerization and networking programs in order to provide a modern and effective working environment. By installing Local and Wide Area Networking systems (LAN/WAN), universities have been equipped with modern communications systems, supporting local intranet, Internet, and PERN accessibility which allows the real-time transfer of audio and video, multimedia-enabled lectures, remote research partnerships, and many other applications hitherto unknown. This solid foundation for the dissemination of information allows the benefits of the ICT revolution in building indigenous scientific capacity to be exploited (Said, 2006). This fact was also highlighted by Bhatti and Chohan (2013) that HEC has played a major role in the up-gradation of academic and research standards according to the demands of the modern era.

Respondents were asked to report their level of satisfaction about the availability of ICT facilities in their respective university libraries. Findings in Table 4a.13 present a gloomy picture of their satisfaction level. It is alarming to note that out of 200 respondents 148(74%) were not satisfied with the availability of ICT facilities in their respective university libraries followed by 36(18%) respondents who showed their partial satisfaction. Only 16(8%) respondents were fully satisfied with ICT applications in their university libraries (Table 4a.13). Respondents were also asked to give their suggestion for improving

ICT facilities in the university libraries of the province. All respondents suggested that latest versions of computers and fast internet facilities should be provided in the central and departmental libraries. They also demanded the provision of heavy duty printers, scanners and photocopiers in the university libraries for printing and reprographic facilities (Table 4a.14). Though, these suggestions do not seem too difficult to be adopted by the university libraries which are most important for accessing digital and electronic resources. However, financial constraint or other similar issues might have hampered the availability of these facilities in the university libraries of KPK.

Table 4a .14

Frequency Distribution of Respondents' Satisfaction with the ICT Facilities in the University Libraries

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	6	5	10	14	16	8
2.	Satisfied to some extent	19	15	17	23.2	36	18
3.	Not satisfied	102	80.3	46	63	148	74
	Total	127	100	73	100	200	100

Table 4a .15

Frequency Distribution of Respondents' Suggestions for Improving ICT Facilities in the University Libraries

S.No	Suggestions	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Provision of latest computers in the central and departmental libraries	127	100	73	100	200	100
2.	Provision of internet facility in the university libraries	127	100	73	100	200	100
3.	Provision of heavy duty scanners	127	100	73	100	200	100
4.	Provision of heavy duty printers	127	100	73	100	200	100
5.	Provision of heavy duty photocopiers	127	100	73	100	200	100

Note: Multiple options were permitted

4a.6.2 Access to HEC Digital Library in the University Libraries

Library and information services have been transforming rapidly from tangible to intangible formats such as virtual, electronic and digital library, e-resources and services. Ke, Kwakkelaar, Tai and Chen (2002) noted that in the field of scientific technology owing to the explosion of e-databases and e-journals, the way researchers conduct and communicate their research is renovating rapidly and successfully. Sharma, Singh, and Sharma (2011) mentioned that the inception of digital libraries has changed the methods of consulting resources and using information. Faculty members and researches often use these resources for their needed information (Kortelainen, January, 2004). According to Downs and Friedman (1999) digital libraries possess original documents which can be accessed by researchers from their offices, laboratories; homes etc. and facilitate remote research

activities. Chirra and Madhusudhan (2009) observed a huge demand of digital library resources by the teachers and researchers as it provides authentic and reliable information conveniently.

In Pakistan, HEC digital library has provided an opportunity to the universities and institutes of higher learning to have access to high quality peer reviewed journals, databases and articles across the whole range of discipline (HEC, 2007). Khan and Ahmad (2013) found that HEC Digital Library resources are effectively supporting the academic and research endeavours in the universities of Pakistan. Hayat (2011) observed that access to HEC digital library has boosted the pace of research progress in the universities of KPK. According to the report of HEC, published in December, 2012, show that access to HEC digital library has significantly increased research output in the universities of Pakistan.

Respondents were asked to indicate their level of satisfaction about access to HEC Digital Library in their respective universities. A total of 200 respondents reported their level of satisfaction about access to HEC Digital Library which are extracted in Table 4a.15 from questionnaire data. Majority 165(82.5%) of the respondent showed their partial satisfaction regarding access to HEC digital library. Out of 200 respondents, only 11(5.5%) respondents reported their complete satisfaction whereas 24(12%) were completely dissatisfied regarding access to HEC Digital Library (Table 4a.15).

HEC Digital Library has a tremendous collection of resources; however problems like staff training, lack of computers in the libraries, lack of online searching skills, low speed of internet and electricity shortfall hamper its effective usage (Khan and Ahmad, 2013, Khan, 2013). This is why most of the faculty members suggested that universities must have electricity backup systems to ensure power supply and internet connectivity in the libraries. They also suggested the organization of extensive training workshops in the universities to promote HEC Digital Library use and create awareness about it among the

users. They also demanded to increase the number of computers in the central libraries to facilitate multiple accesses to HEC Digital Library in the university libraries of KPK (Table 4a.16).

The overall analyses show an unsatisfactory situation of the usage of HEC Digital Library. It seems that the resources of HEC Digital Library are still underused in the university libraries of KPK. All LIS professionals should create awareness about the usefulness of HEC Digital Library among the users through vigorous promotional strategies. LIS professionals should also arrange information literacy programs for the faculty members to enable them to make the effective use of HEC Digital Library resources. Furthermore, those universities which are newly established and have no access to HEC Digital Library should take up this issue with the authorities of HEC so that the user community of these universities may also benefit from the resources of HEC Digital Library.

Table 4a .16

Frequency Distribution of Respondents' Satisfaction with the Provision of HEC Digital Library in the University Libraries

S.No	Level of Satisfaction	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Satisfied	6	5	5	7	11	5.5
2.	Satisfied to some extent	104	82	61	83.5	165	82.5
3.	Not satisfied	17	13.3	7	9.5	24	12
Total		127	100	73	100	200	100

Table 4a .17

Frequency Distribution of Respondents' Suggestions to Improve the Use of HEC Digital Library in the University Libraries

S.No	Suggestions	Sector					
		Public (N=127)		Private (N=73)		Aggregate (N=200)	
		N	%	N	%	N	%
1.	Organization of extensive training workshops in the universities to promote HEC Digital Library use and create awareness about it among the users	127	100	69	94.5	196	98
2.	Information professionals should arrange training sessions in the central libraries and departments on periodic basis to make users aware about HEC Digital Library latest programs	125	98.4	66	90.4	191	95.5
3.	Universities must have electricity backup systems to ensure power supply and internet connectivity in the libraries	127	100	73	100	200	100
4.	Latest and adequate numbers of computer should be provided to the central libraries in the universities	120	94.4	61	83.5	181	9.5
5.	Internet speed should be improved	127	100	69	94.5	196	98

Note: Multiple options were permitted

The mission and goals of any university library revolves around meeting the informational, educational, learning and research needs of its clientele. Therefore, library services and collection should be developed based on the understanding of the users' needs. The more the collection development staffs knows about the work roles, education, and information behaviour the more likely it is that the collection will provide the desired information at the time desired. Moreover, the data collected through users' needs assessments provide a sound based for effective collection development and management. In today's collection development environment, emphasis is more on electronic resources; therefore LIS professionals must have information about the technological capabilities of the users or lack of access in some cases, in order to make effective acquisition decisions. Data collected through users' needs assessment projects is also useful in policy formulation, selection, and evaluation which also provide base for policy modification and establishing selection parameters (Evans and Saponaro, 2005). Therefore, knowing what the needs of your users are and letting them know what is available in the library for them is the key function of collection development and management (Gregory, 2011).

Section II: Qualitative Data Analysis and Interpretation

The main objective of this study is to investigate CM activities in the university libraries of KPK. The quantitative data reported in the first section of this chapter was an attempt in this regard. Most of the research questions asked in this section are on the pattern of questionnaire which was answered earlier in the quantitative section. However, this is an attempt to study the phenomenon more extensively, fill the gaps of quantitative data and verify facts to enhance credibility of the findings. This approach was applied with the purpose to overcome the inherent limitations of questionnaire data and correlate the qualitative data with the survey results.

This section aims to seek answers of LIS professionals and educationalists on the following research questions through interviews.

1. What are the policies of CM adopted by the university libraries of KPK?
2. What are the procedures of CM adopted by the university libraries of KPK?
3. What are the main issues and challenges of CM in the university libraries of KPK?
4. What is the impact of IT, electronic resources and HEC Digital Library on CM in the university libraries of KPK?

The interview schedule comprised 14 sections with further subdivisions of each section. The schedule included questions on users' needs assessments, collection development policy, selection and acquisition procedures, gifts and donations, budgeting and fiscal management, bibliographic access and physical preparation, marketing and assessment of collection, and weeding processes. It also included questions on resources sharing programs. Finally, questions related to the impact of ICT, electronic resources and HEC Digital Library were also asked from the LIS professionals and educationalists.

Face to face interviews were conducted with senior LIS professionals of 25 public and private sector universities and four former and working heads/chairpersons of the

departments of Library and Information Science, University of Peshawar, and Sarhad University of Science and Technology, Peshawar. Out of 25, 16 LIS professionals participated from public and nine private sector universities. One LIS professional in a public sector university did not give time for the interview because of busy schedule.

Members of the library committees were planned to be interviewed. However, this group constituted the limitation of the study. The reason was that most of the universities had no library committees. During the process of quantitative data collection some respondents mentioned the presence of library committees in their universities, comprising faculty members. However, when those faculty members were approached for interviews, it was noted that they were basically subject experts and books selectors and had neither a role nor knew about the CM activities of their university libraries. Therefore, no information related to the objectives of the study could be elicited from them.

All interviews were conducted in native language (Pashto) and answers were recorded by taking notes. The interview schedule was supplemented by an audio recorded device however, respondents showed their concerns regarding audio tape recording. Maximum efforts were made to ensure respondents' anonymity.

The contents of the interviews were extensively reviewed, organized, analyzed and categorized using a thematic approach. Content analysis of the interview transcripts are presented in tables preceded the interpretations and analysis.

Frequency distributions of interviewees are presented in the Table 4b.1 and Figure 4b.1.

Table 4b.1

Frequency Distribution of the Interviewees

S.No	Interviewee	Frequency		
		Sector		
		Public (N=16)	Private (N=9)	Sum
1	Library and Information Science Professionals	16	9	25
2	Library and Information Science Educationalists	3	1	4
3	Members of the Library Committees	0	0	0
Total		19	10	29

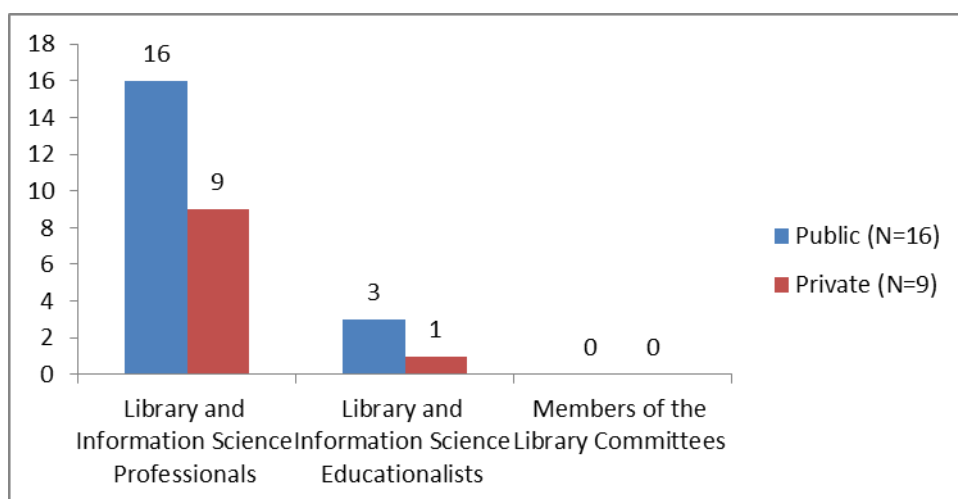


Figure 4b.1: Frequency Distribution of the Interviewees

Table 4b.2

Frequency Distribution of Cities Where Interviewees Work

S.No	City	Frequency
1.	Bannu	1
2.	Charsadda	1

3.	Dera Ismail Khan	2
4.	Dir	1
5.	Haripur	1
6.	Kohat	1
7.	Malakand	1
8.	Mansehra	1
9.	Mardan	1
10.	Nowshera	1
11.	Peshawar	16
12.	Swabi	1
13.	Swat	1
Total		29

Most of the respondents were from Peshawar (n=16) (Table 4b.2).

**Part I: Interviews with LIS Professionals Regarding the Policies and Procedures of
CM in the University Libraries of KPK**

4b.1 Needs Assessments of the Users for Collection Development and Management

Table 4b.3

Content Analysis of Responses (N=25)

S.No	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequency
1.	Users' needs are assessed at the start of every academic year	9	6	15
2.	Users' needs are assessed whenever budget is received	10	3	13
3.	Users' needs are assessed whenever need arises	1	0	1

Note: Multiple responses were recorded

Library and information science professionals were asked to highlight the frequencies of their users' needs assessments projects. It was noted that both public and private sector universities are engaged in assessing users' needs for collection development and management at a minimal level depending upon library budgets and at the start of academic years or whenever needs arises. All LIS professionals were in favour of users' needs assessment and expressed their opinions that it provides strong basis for effective CM. However, it was observed that the frequencies of users' needs assessments varied from library to library and university to university. Users' needs assessment projects seemed to be more dependent on the curriculum requirements, release of budget to the libraries or whenever the need arises depending upon the will of the library establishment and university administrations.

Majority of LIS professionals expressed during the interviews that they carry out users' needs assessment projects at the start of every academic year (n=15%), when new admissions are made and the old students are promoted to their next higher grades.

Budget seemed to be another influential factor on the users' needs assessment of the university libraries of KPK. Thirteen LIS professionals mentioned no time for conducting users' needs assessments project in their libraries. They were heavily dependent on the release of budget to libraries. One library professional mentioned that users' needs assessment is conducted whenever need arises.

The overall analysis indicates two groups of LIS professionals; group first seems to be more conscious about their users' academic and information needs, whereas the later one appears to be passive, inactive and sedentary. The second group assess users' needs whenever budget is received and need is felt. But in real sense it is their responsibility to conduct users' needs assessments in advance regularly, irrespective of making dependency on financial and other issues.

4b.1.1 Problems Faced While Conducting Needs Assessments of the Users

Table 4b.4

Content Analysis of Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequency
1.	Lack of coordination from the faculty members	8	2	10
2.	Lack of coordination from the students' community	7	2	9
3.	Administrative problems and issues	9	3	12
4.	Lack of staff in the library	6	2	8

5.	Lack of resources in the library	7	2	9
6.	Lack of budget in the library	10	3	13
7.	Face no problems	0	4	4

Note: Multiple responses were recorded

Library and information science professionals highlighted various problems affecting the process of needs' assessments of the users. Thirteen LIS professionals reported that their basic problem is budget. Apart from financial issues, most (n=12) LIS professionals expressed serious concerns about university administration in the affairs of the library. They expressed that all things are done at the behest of administration without taking LIS professionals into confidence. This shows that parallel to financial issues there is a lack of harmony between the university administrations and LIS professionals. Due to this issue, LIS professionals informed that demands are sent to the administration but in majority of the cases they are kept pending and not responded/decided in time.

Library and information science professionals also expressed their concerns regarding lack of cooperation from faculty members and students communities. They expressed that for successful needs assessment projects the cooperation of teaching and students are indispensable who provide basic data for collection development. However, lack of cooperation from faculty and students is adversely affecting CM policies and procedures of academic libraries in the universities of KPK.

The analyses of the whole situation indicates that majority of the problems are faced by the LIS professionals of public sector universities including human resources (n=6) and other resources (n=2), necessary for effective CM activities in the university libraries. During interviews it was noted that 4 private sector universities did not face any problem in assessing the needs of their users' communities, which shows their strong CM activities in libraries. This also indicates mutual harmony and sound coordination of LIS professionals

with administration, teaching faculty and other stake holders which is why they are not facing problems including financial, administrative and lack of resource in the process of needs assessments.

4b.2 Collection Development Policies for the University Libraries

Table 4b.5

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequency
1.	Lack of coordination from the faculty members	5	3	8
2.	Administrative problems and issues	11	7	18
3.	Lack of resources in the library	4	3	7
4.	CDPs are important for university libraries	16	9	25
5.	Efforts have been made for the formulation of CDP	16	9	25

Note: Multiple responses were recorded

Library and information science professionals were asked the very first question during interviews i.e. does your library have a formal written CDP? Twenty four LIS professionals gave the same answer to this question (No we do not have formal written CDPs in our library). It was also noted during the analyses of the quantitative data that “Shaheed Benazir Bhutto University” previously known as “Frontier women university, Peshawar” mentioned the presence of a written CDP. But in fact, when studied by the researcher, it was a document containing guidelines for the purchase of books and other reading materials for college libraries of the province. This was an inherited document by the university administration for running the purchase related matters of library. This too

indicated the non-availability of an independent CDP in the Shaheed Benazir Bhutto University, Peshawar.

Library and information science professionals in public and private sector universities appeared serious about the formulation of written CDPs. However, lack of proper interest by library management, insufficient efforts by LIS professionals towards realising their active role for the formulation of written CDPs, absence of proper library committees, lack of coordination from the faculty, administrative problems with the authorities and lack of resources in the library were the main factors affecting the formulation of written CDPs. Library professionals also told about their initiatives for the formulation of written CDPs where proposal had been sent to the concerned authorities for approval but responses to that effect were awaited since long.

It was also observed that all private sector university libraries, were working without CDPs. Though, they consider CDPs important as a guiding map; however LIS professionals appeared more reliant and dependent on the decisions of higher authorities. Most of them expressed that since in the private sector boss has the full authority to decide about things and power of command rests with the owners/administration, therefore, LIS professionals just execute what is ordered. They mentioned that all issues including library related matters are handled by the university administration therefore; they neither felt the need of CDPs nor faced problems in their absence.

In nutshell it was observed that in the absence of formal written CDPs, university libraries in KPK have some type of non-documented traditional procedures for selection, acquisition, budget allocation and other library activities.

4b.3 Selection of Library Materials

Table 4b.6

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=17)	Private (n=17)	Frequency
1.	Centralized Selection (Central library select all materials for users' community)	14	9	23
2.	Decentralized Selection (Departmental libraries select materials independently)	2	-	2
3.	Electronic format is easy to Select	1	1	2
4.	Paper format is easy to Select	9	7	16
5.	Both are is easy to Select	5	1	6
6.	Users are interested in electronic formats	1	1	2
7.	Users are interested in paper formats	8	5	13
8.	Users are in interest in both formats i.e. Electronic and Paper	7	3	10
9.	Selection of materials is made according to the need assessments of the users' community	12	8	20
10.	Selection of materials is made when availability of funds	10	1	11
11.	Selection of materials is made to fulfil HEC and various other councils' requirements for affiliation and accreditation etc.	9	7	16

Note: Multiple responses were recorded

Local and foreign literature demonstrates that sound collection development in the university libraries depends on the effective selection policies and procedures, devised in the light of the needs assessment of the users' communities. The main objective of a good book selection policy is to address the educational, research and informational needs of the users at the time of selection. Library and information professionals in the university libraries of KPK were asked multiple questions including the nature of selection, format choices, bases of selection and problems encountered during the process of selection of reading materials in their university libraries.

The nature of selection of library materials in most of the public and private sector universities is centralized where all type of materials are selected by the central library according to the needs assessments of the users. Only two LIS professionals mentioned decentralized selection procedures in their universities where departmental libraries were independent in the selection of library materials.

On the basis of selection of library materials, public and private sector universities were found divided into three categories i.e. universities making the selection of materials on the basis of needs assessments of users, universities making the selection of materials on the basis of the availability of funds and universities making the selection of materials to fulfil the recognition and accreditation requirement of HEC and different other councils.

In this regard the private sector seems to be more dependent on the last whereas the public sector on the second category for the selection of library materials. Library and information professionals in the private sector indicated that they make the selection of materials according to the demands of users' community. However, since their institutions have affiliation with different councils like Pakistan Medical and Dental Council, Pakistan Bar Council, Pakistan Pharmacy Council, Pakistan Engineering Council and different other councils and associations, therefore they also fulfil their affiliation requirements in respect

of their library collections. Being in the private sector, HEC have also criteria for the award of affiliation where the presence of good collections in the library of the affiliated institution is mandatory. Therefore, they also cater for the criterion requirements of HEC.

During the interviews, 10 LIS professionals from the public sector mentioned the effects of budget cuts on the public sector universities of the province. The professionals of Gomal University, DI Khan reported that due to sever budget crunches in the university they had not been given their salaries for the last 6 months.

Library professionals also expressed that traditional collection is easy to select and much popular among the users, however, based on their professional experience they also mentioned their users' tendency towards electronic materials.

4b.3.1 Problems in the Selection of Library Materials

Table 4b.7

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Lack of communication among faculty members and librarians	9	3	12
2.	Copyright and other legal issues in selection	1	2	3
3.	Inclusion of foreign books in the syllabus in selection	3	3	6
4.	Absence of up-to-date lists of books and other reading materials for selection	4	2	6
5.	Budgetary issues	10	1	11

Note: Multiple responses were recorded

Library and information science professionals were asked to mention problems which they encounter in the process of selection of library materials. During the interviews, it was observed that there is a big gap of communication between LIS professionals and faculty members. There has been a hot debate on the issue of “who should select” library materials. The literature on this issue can be divided into two groups/camps. One group believes that faculty and the other consider that LIS professionals are responsible for the selection of library materials. Each group have claims and supportive statements in their own favour, however, notwithstanding with this issue, it should be a joint venture of faculty and LIS professionals. The current study predicts its negative impact on the collection development policies and procedures of the university libraries of KPK, because; lack of coordination between faculty and LIS professionals effects the speedy and quality selection of library materials. Eleven LIS professionals expressed their deep concerns on the budget cuts which was drastically affecting their libraries. Six library professionals indicated that the inclusion of foreign books and the unavailability of up-to-date lists in the local market create problems for them in the process of selection of library materials.

The infiltration of electronic resources has also brought many opportunities and challenges for the information professionals. Three library professionals mentioned that electronic resources create copyright and other relevant issues in the selection process.

4b.4 Acquisition of Library Materials

Table 4b.8

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Existence of acquisition departments	4	1	5
2.	Nonexistence of acquisition departments	12	8	20

3. Universities possessing written acquisition policies	2	1	3
4. Universities acquiring foreign materials from abroad directly	1	1	2
5. Universities acquiring foreign materials through local bookseller and agents	6	3	9
6. Problems at Custom clearance	4	2	6
7. Foreign exchange/fluctuation in foreign curacy rates in Pakistan	5	2	7
8. Trade embargoes	2	1	3
9. Complication in import policy	2	2	4

Note: Multiple responses were recorded

Library and information science professionals were asked to mention the existence of acquisition departments, policies and procedures in their respective university libraries. Out of 25 interviewees, only five university libraries, four in public and one in the private sector reported the presence of acquisition departments. Only three LIS professionals reported the presence of written acquisition policies in their university libraries.

All the university libraries of KPK, both in public and private sectors acquire printed materials from local markets either visiting bookshops or placing orders to local bookseller, book supplier agents and vendors. Two universities, one each in public and private sector, parallel to the acquisition of local materials also acquires foreign materials directly from abroad. Other six universities also mentioned the acquisition of foreign materials from abroad through local bookseller and books supplying agents. They informed the researcher that acquiring foreign materials directly from abroad carry certain problems i.e. exchange rate, shipment charges, custom clearance etc. Therefore, to avoid these issues they place

orders to the local publishers where all terms and conditions are settled with them prior to agreements. However, LIS professionals also mentioned that despite acquiring foreign material through local bookseller and agents they receive claims of increase rates of books because of dollar's fluctuating rate, destabilized position of Pakistani currency, complications in import policy and custom clearance at airports.

Regarding the question of library staff participation in the process of acquisition, 18 LIS professionals reported their participation in the process of selection and acquisition of library materials. Seven professionals responded in negative and expressed deep concerns regarding their participation in the process of acquisition. They expressed their views that all books are selected and acquired by the faculty members without taking them on board. They further expressed that their roles are limited to the preparation of books lists, order works, accessioning, record management and other similar processing of library materials. It was also noted that none of them (these seven LIS professionals) observed library staff participation in the process of selection and acquisition of materials in the last five years of their service. This is why they showed complete dissatisfaction regarding library staff participation in the process of acquisition.

4b.4.1 Gifts and Donations

Library and information science professionals working in the public and private sector university libraries were inquired about their policies and procedures of accepting or refusing gifts and donations. All LIS professionals in the public sector reported that they accept gifts and donations in the form of books in their libraries. In this regard, the central library of the University of Peshawar reported that their ratio of accepting gifts is 10% higher than annual purchases. Out of 16 university libraries only three had policies for accepting gifts and donations or otherwise. The rest of 13 universities in KPK follow this practice without any policy.

On the other hand two public sector universities reported that they do not accept unnecessary gifts and donations in their universities. They expressed that accepting unnecessary gifts in the form of books and journals create duplication and space related problems, therefore, they avoid it.

It was noted that neither public nor private sector universities had ever received donations in the form of money from organizations or individuals for the purchase of library materials. However, LIS professionals of the KPK University of Agriculture mentioned about a grant of Rs. 39.7 million from the HEC, which had in part an amount for the purchase of books and other requirements of their central library. This amount was released to the Agriculture University by HEC under financial assistance and was not under gifts and donation heads.

The overall analyses of the qualitative data show that universities of KPK receive different kinds of materials including books and non-book materials under gifts and donations. However, materials received in the form of books are far more than that of any other form.

4b.5 Budgeting and Fiscal Management

Table 4b.9

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Universities with funding policies for their libraries	9	6	15
2.	Universities without funding policies for their libraries	7	3	10
3.	Budget allocation on annual basis	13	8	21

4. Universities without budget allocation on annual basis	3	1	4
5. Budget allocation in lump sum	8	5	13
6. Items specific budget allocation	5	3	8
7. Budget cuts on the universities has place a severe impact on the acquisition	10	0	10
8. Budget cuts on the universities has place no impact on the library CM	6	9	15
9. Emergency financial plans for CM in the universities libraries	1	1	2
10. Agreements with donor agencies for the supplying of reading materials, staff training etc.	3	0	3

Note: Multiple responses were recorded

Due to multiple factors university libraries in Pakistan are under heavy financial pressures. The university libraries of KPK are no exceptions. To probe the effects of financial crunches on the university libraries of KPK, LIS professionals working in the high ranks were asked to provide information about library funding policies, annual budget allocation, the effects of prevailing budget cuts on the CM of their libraries and alternative plans devised to tackle the situation.

A total of fifteen, nine universities in the public and six in the private sector reported the existence of funding policies administered by the concerned university authorities for the CM activities of libraries. Ten universities had no funding policies for their library's CM policies and procedures. Twenty one universities allocate budget for their libraries on annual basis. However, the budget allocation contains all packages including staff salaries,

contingencies, and purchase of different items other than reading materials including books. It was also noted that cuts are usually placed by the universities' finance departments on materials budget (purchase of books and other reading materials) excluding other heads. It seemed that collection building has been the most effected and targeted area for budget adjustments in the university libraries of the province. Majority of the university libraries receive their budgets in lump sum. This provides library administration an opportunity to utilize budget according to requirements of the library. However, out of twenty one, eight universities provide budget with items specifications where different amounts are mentioned for different heads i.e. purchase of books, subscriptions of journals and databases etc.

Different views of LIS professionals reflected that majority of them were unaware of the exact figures of their annual budget allocation for library CM related activities except few, who provided tentative estimates/ information about budget figures (Table 5.10 & 5.11).

In response to a question regarding budget cuts on the universities and its effects on libraries, ten LIS professionals replied that their acquisition has received a severe setback in this regard. Six professional from the public sector expressed their concerns that they had been in status quo position before and after budget cuts on the universities. Therefore, they did not mention any effects of budget cuts on their libraries' CM policies and procedures.

On the other hand, private sector universities seemed under less financial burdens. During the interviews information professionals from the private sector expressed their views that since they are not dependent on the grants of HEC, federal and provincial governments or any other funding bodies and generate own funds, therefore, as compare to public sector universities their financial position is quite strong. They further informed that lists of requirements are placed to the authorities and are fulfilled without making any

deduction, reduction or pointing to other issues, rather their demands are accepted in as it is form.

Data indicate that budget cuts might have drastically affected public sector universities in the province. However, these financial issues vary from university to university. It was also observed during the interviews that compare to the newly established universities in the province, the old universities are under severe budget crunches. The figures in Table 4b.10 are self-explanatory in this regard.

Out of 25 only two library professionals, one each from public and privates sector reported the establishment of emergency plans to encounter financial issues where they had entered into agreements with the donor agencies for the acquisition/purchase of books/reading materials, staff trainings and skill development programs.

Table 4b.10

Public Sector Universities' Last Five Years Budget Allocation (n=25)

Name of Universities	Data of establishment	Last Five Years Budget Allocation in Pakistani Rupees				
		2012	2011	2010	2009	2008
Abdul Wali Khan University, Mardan	2009	-	-	-	-	-
Frontier Women University, Peshawar	2005	-	-	-	-	-
Gomal University, D.I. Khan	1974	-	-	200,000	200,000	200,000
Hazara University, Dodhial, Mansehra	2001	-	-	-	-	-
Islamia College University, Peshawar	2008	50,000	-	-	-	-

Khyber Medical	2009	2.5	1.1	800,000	-	-
University, Peshawar		Million	Million			
Kohat University of	2002	-	-	-	-	-
Science and						
Technology, Kohat						
KPK Agricultural	1995	39.7	-	-	-	-
University, Peshawar		Million				
		*				
NWFP University of	1980	--	-	-	-	-
Engineering. &						
Technology, Peshawar						
Shaheed Benazir	2009	1.5	4	4 Million	-	7
Bhutto University,		Million	Million			Million
Sheringal, Dir						
University of	2001	-	-	-	-	-
Malakand, Chakdara,						
Dir, Malakand						
University of	1950	1	1	500,000	300,000	200,000
Peshawar, Peshawar		Million	Million			
University of Science	2005	-	-	-	-	-
& Technology, Bannu						
University of Swat,	2011	-	-	-	-	-
Swat						
University of Haripur	2012	-	-	-	-	-
Bacha Khan	2012	9	-	-	-	-

University		Million				
University of Swabi	2012	20	-	-	-	-
		Million				

* This amount was approved by HEC for Agriculture University Peshawar under the project of Strengths and Demands of Agriculture University in 2013
- did not mention their budget for the mentioned year

Table 4b.11

Private Sector Universities' Last Five Years Budget Allocation (n=25)

Name of Universities	Data of establishment	Last Five Years Budget Allocation in Pakistani Rupees				
		2012	2011	2010	2009	2008
Abasyn University, Peshawar	2007	3,00,000	150,000	-	-	-
CECOS University of Information Technology & Emerging Sciences, Peshawar	1986	-	-	-	-	-
City University of Science and Information Technology, Peshawar	2001	-	-	-	-	-
Gandhara University, Peshawar	1995	-	-	-	-	-
Iqra National University, Peshawar	2010	500,000	300,000	300,000	200,000	200,000
Northern University, Nowshera	2002	-	-	-	-	-
Preston University, Kohat	1996	-	-	-	-	-

Qurtaba University of	2001					
Science and Information		600,000	600,000	500,000	500,000	500,000
Technology, D.I. Khan						
Sarhad University of Science	2001					
and Information Technology,		-	-	-	-	-
Peshawar						
- did not mention their budget for the mentioned year						

4b.6 Bibliographic Access and Physical Preparation

Table 4b.12

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Availability of technical section for assigning subject headings, classification, cataloguing and physical preparation	5	2	7
2.	Unavailability of technical section	11	7	18
3.	Onsite (one can physically consult it in the library only)	12	6	18
4.	Both Onsite and Online Access	4	3	7
5.	Provision of access to library related information via university websites	8	5	13
6.	Independent websites (Under construction)	3	0	3
7.	University libraries providing no online access to library related information	5	4	9

8. Updating information on websites	7	4	11
9. Do not update information on websites	1	1	2

Note: Multiple responses were recorded

Out of 25 LIS professionals, five from public and two from private sector reported the presence of technical sections in their libraries. Designated cataloguers and classifiers were the in-charge of technical sections. Information resources are transferred to these sections after their acquisition. In technical sections concerned experts assign subjects headings to information resources. They are properly recorded in the accession registers, classified, catalogued; spine labelled and is displayed on shelves for the users in the libraries. Fifteen libraries also prepare and maintain computerized records of their information resources.

With respect to access to library materials, majority (n=25) of the university libraries in KPK provide onsite access to their holdings where users can physical consult and issue reading materials. Parallel to onsite access, seven libraries, four in public and three in private sector also provide online access to their holdings through computerized catalogues.

Thirteen LIS professionals indicated the provision of information about their libraries on the official websites of concerned universities. Out of these 13 universities 11 update information about library collections, services and staff on the websites in order to facilitate and guide users. The rest of universities (n=2) do not update information on the websites.

Three libraries had their independent websites which were underdeveloped whereas; the rest of the university libraries had neither independent websites nor borrowed any space on their institutions' websites for lunching library's related information.

4b.7 Promotion of Collection to the Users

Table 4b.13

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Library collection and services are promoted through orientation programs in the library	11	7	18
2.	List of new arrival are displayed on the main entrance of the library	7	2	9
3.	List of new arrivals are sent to departments for display on notice boards.	11	4	15
4.	Information about library collection and services is uploaded on university websites	5	0	5
5.	Information about library materials and series is sent to all students and faculty members via email alerts.	4	0	4
6.	Information library collection is shared with users through social media i.e. face book etc.	1	1	2

Note: Multiple responses were recorded

During the interviews, LIS professionals were asked about different strategies which they had adopted for the promotion of their library collections. It was noted that most of them had adopted traditional marketing strategies for collection promotion. Out of 25 LIS professionals, 18 mentioned the arrangements of orientation programs to promote library collection and other services to the users. Displaying lists of new arrivals on library and departmental notice boards were also reported by 9 and 15 respondents respectively.

Seven LIS professionals did not mention any kind of collection promotion strategies. During researcher's visits to university libraries colourful subject headings was also found inserted/ pasted on the book shelves for users' guidance and assistance which appeared a common strategy for collection promotion adopted by most of the university libraries of the province.

The analyses of responses further identified the application of modern techniques and technologies including the usage of institutional website (n=5), email alerts (n=4) and application of social media (n=2) for the promotion of library collection and services.

The overall situation illustrates that university libraries in KPK are using traditional methods of marketing for library collections and services. However, LIS professionals seemed to be in a transitional phase while making a shift towards modern trends, parallel to their traditional practices for library collection and services promotion.

4b.8 Evaluation of the Collection

Table 4b.14

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Libraries involved in the assessment and evaluation of collection	11	5	16
2.	Libraries do not assess and evaluate library collection	5	4	9
3.	Comprehensive evaluation (whole stock assessment)	10	6	16
4.	Target specific subject area for evaluation (subject(s) selection for evaluation)	5	3	8

5. Assessment and evaluation of electronic resources	3	3	6
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Note: Multiple responses were recorded

Evaluation of collection is important for collection development and management because it is impossible to build a balanced, relevant and up-to-date collection unless the strengths and weaknesses of the existing collection are known.

The term evaluation of collection seemed a bit confusing among the LIS professionals of the universities. They were mixing it with the physical verification and stock taking of library materials which is usually conducted at a certain period of time or after the transfer posting of LIS professionals in libraries. It was, therefore, explained to them as required according to the context of the study.

Sixteen LIS professionals expressed to be involved in the evaluation of collection. Nine professionals articulated that since their collection is small and limited, therefore they never felt the need to assess and evaluate library collection.

During the whole process of interviews two kinds of evaluation strategies were noted which both public and private sector universities had adopted. Comprehensive evaluation and assessment of stock (in which the whole stock of the library is evaluated) followed by targeting specific subject areas for evaluation (in which a subject portion in the library is selected for evaluation) was mentioned by 15 and 8 LIS professionals respectively. Seven libraries had adopted a mix of both. Six LIS professionals also reported the evaluation of electronic resources in their libraries.

Apart from it, the overall analyses of the responses show that stock taking has been a problematic area for LIS professionals in the university libraries of KPK, especially in libraries with large collections. Most of the LIS professionals considered it expensive with respect to time, staff and money and useless. But it is considered most important at the time

of transfer posting of LIS professionals in libraries for the purpose to avoid audit, administrative and account related objections.

4b.9 Weeding

Table 4b.15

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Books and Journals should be weeded out	10	7	17
2.	Space problems in libraries	10	3	13
3.	Faculty and administration resist weeding	15	9	25

Note: Multiple responses were recorded

In response to a question on written policies for weeding, 10 LIS professionals reported the possession of old and ineffective written weeding policies in their libraries, whereas, rest of the professionals replied in negative. Despite possessing weeding guidelines most of the LIS professionals showed their least interest in weeding out library materials. They informed that results of physical verification and stocktaking is shared with the university administration for guidance and information, however, LIS professionals are never responded or guided in this regard. Library and information science professionals also expressed that insisting on weeding library materials and taking up this issue with university administration and faculty members again and again sometimes creates doubts in their minds and since library administration cannot take independent decisions in this regard, therefore, the issue of weeding has been longstanding in their university libraries.

Apart from faculty and administration resistance, weeding also causes audit related issues which in-spite of rules is sometimes unjustifiable on the half of the librarians' community. A ten years old dump of books and its case for the approval of weeding was

shown to the researcher by a university library. However, university authorities have not given proper attention to that old case despite elapse of ten years.

Library and information science professionals were generally asked to give their opinions about the time period for weeding. Most of them expressed that since the rate of publication of books and journals is high and on daily basis something is added to the library stocks, therefore weeding should take place on annual basis to avoid space related problems. However, the views of LIS professionals regarding the frequency of weeding were varied and diverse. Seven LIS professionals suggested that weeding should take place after five years; 5 mentioned its frequency two years whereas, other 2 suggested weeding after every three years.

They also expressed that since books and journals contain the main portion of academic libraries and are mostly used by the users. Therefore, special focus should be place on weeding out such kinds of materials which have rusted due to excessive use.

Thirteen LIS professionals reported that weeding has not taken place in the last so many years in their libraries which have created severe space related problems in their libraries. However, this issue was observed in the old universities of the province with large collection size. The newly established university libraries housed in rented buildings were facing similar kinds of problems.

4b.10 Resource Sharing Programs

Table 4b.16

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	Universities engaged in exchange programs at local level	2	0	2

2.	Universities engaged in exchange programs at national level	2	0	2
3.	Universities engaged in exchange programs at international level	0	0	0
4.	Cooperative collection development and resource sharing programs are necessary for libraries to overcome/reduce the cost of acquiring journals, books, and electronic materials	16	9	25

Note: Multiple responses were recorded

The status of resources sharing programs was inquired from the LIS professionals of all the universities of the province. The analyses of responses demonstrate a complete absence of resources sharing programs among the university libraries of KPK with in and across public and private sectors. All LIS professionals were possessive about their library collections. Some of them shared their professional experiences and said that they had never received back a copy of book loaned to a sister university library. They also expressed their views that this practice has also created problems for their colleagues at the time of pension, because the prices of books, shared during their tenure with other university libraries were deducted from their pension amount. The study found an isolated position of each library and LIS professionals restricted to their own domains with respect to resource sharing programs.

Library and information professionals informed about their engagements in the exchange programs at local and national levels. Only two universities informed about their exchange programs which were under some kind of mutual understanding/consortia. It was

further noted that these programs were limited to the exchange/give and take of institutional publications i.e. research journals and magazines etc.

Though, not engaged in the resource sharing programs, all LIS professionals highlighted high need of it among the university libraries of KPK at local, national and international level to overcome/reduce the cost of acquiring journals, books, and electronic materials which no individual university can afford in the prevailing dwindling budgets and high expectations of users' communities.

4b.11 Impact of ICT, Electronic Resources and HEC Digital Library on CM

Table 4b.17

Content Analysis of the Responses (N=25)

S.No.	Statements	Sector		
		Public (n=16)	Private (n=9)	Frequencies
1.	ICT, electronic resources and HEC Digital Library has placed a good impact on the traditional policies and procedures of CM in the university libraries	14	9	20
2.	Orientation programs are arranged for HEC Digital Library	2	1	3
3.	Universities can improve their ranking with the applications of ICT and usage of HEC Digital Library	14	9	20

Note: Multiple responses were recorded

Library and information professionals were asked to indicate the impact of ICT, electronic resources and HEC Digital Library on the traditional policies and procedures of their libraries' CM activities. Out of 25 professionals, 20 reported that the applications of

ICT, electronic resources and HEC Digital Library program have boosted research activities and productivity in their universities. They further expressed that the applications of ICT, access to electronic resources and HEC Digital Library are effective tools to fulfil the information needs of researchers, students and academic community instantly.

It is worth important to note that access to HEC Digital library is not available to 4 public and a private sector university in KPK. Library and information professionals informed researcher that since these universities are newly established and have yet to fulfil certain criterion requirements of HEC, therefore access to Digital Library has not be made available to them.

It was also observed that the applications of ICT, access to electronic resources and HEC Digital Library have assisted professional librarians to improve their CM activities in the university libraries of the province. It has enhanced different library activities and reduced the challenges of traditional collection development policies and procedures like selection, acquisition, cumbersome job of technical processing, access issues, weeding, space, financial matters and different administrative problems in the university libraries of the province.

Nineteen LIS professionals reported that they had attended on job/in service trainings, short courses, seminars/workshops on the applications of ICT, accessing electronic resources and usage of HEC Digital library which have enabled them to arrange proper training sessions and information literacy programs for the users' to educate them about different searching techniques and using the electronic and digital resources of HEC Digital Library.

Regarding a question about the effect of these trainings, 11 LIS professionals mentioned that they had place very high impact on the information needs and seeking

behaviour of their users' community. Eight rated this impact high, 4 fair and 2 mentioned it low.

To promote the use of HEC Digital Library and encourage its usage on wider scale, LIS professionals were using different kind of techniques including orientations/trainings in the library (n=12), uploading information about HEC Digital Library on university websites (n=5) and sending emails on employees official IDs (n=1), library notice boards displays (n=7), providing information on brochures and posters (n=3) and the provision of a detail descriptions in the annual report and newsletter of the universities.

Out of 25 LIS professionals, 20 expressed their views that this is basically access to electronic resources and HEC Digital Library which stimulates research in universities and determines their position among the HEC Universities Ranking System, under which a university is graded according to its research production in a specified period of time.

Two LIS professionals were holding different views about HEC Digital library who expressed that it is generally believed that access to HEC Digital library and use of ICT is everything in libraries. However, according to them, people who believe so are hypothetically engaged in the myth and reality of ICT and HEC Digital library. These 2 professionals rated the effectiveness of ICT applications in libraries and HEC Digital Library as "Effective to Some Extent" which somehow reflect their orthodox approach.

The analyses of responses of LIS professionals show their high favour for the adoption and usage of ICT, availability of electronic resources and access to HEC Digital Library. It was also observed that HEC Digital Library has also placed a tremendous impact on the traditional policies and procedures of university libraries in KPK by providing access to high quality peer reviewed electronic resources.

Local literature also supports the effectiveness of HEC Digital Library. In the past years research scholars had no access to resources for their research (Khan, 2013) but this gap has been successfully bridged up by the HEC Digital Library program. HEC Digital Library has a positive role in the provision of desired resources to the users' community (Jan and Sheikh, 2011) and has accelerated the pace of research in the universities of KPK (Khan, 2011). The establishment of Digital Library is an outstanding effort of HEC. The findings of this section also justifies and confirm the claims of a recently conducted study of Bhatti, Chohan and Asghar, (2014) that HEC DL resources have placed a radical impact on the changing higher education environment in Pakistan.

Part II: Interviews with LIS Educationalists Regarding the Policies and Procedures of CM in the University Libraries of KPK

In the last phase of data collection, senior faculty members were interviewed including former and working heads and chairpersons of the LIS departments, established and working in the public and private sector universities of KPK. The main purpose of this was to get their perceptions regarding the current status of CM activities, issues and challenges, role of LIS professionals and faculty collaboration on the CM of university libraries, impact of budget cuts and the need for alternative strategies to cope up with financial crunches of libraries, the role of ICT, electronic resources and HEC Digital Library and the needed competences of LIS professionals to handle the current and evolving nature of CM in the university libraries of KPK.

Presently there are three institutions where LIS education is imparted in the province of KPK, Pakistan. University of Peshawar is the oldest institution providing LIS education in the province since 1982 followed by Sarhad University in the private sector established in 2001. To meet the increasing demands for LIS education, the private sector was also encouraged to share the responsibility with the universities and higher education institutions, where a number of students are enrolled on regular basis. Admissions in such (affiliated) institutions are strictly on the basis of merit as regulated by the statutory bodies of the universities/institutes. The affiliation granting university's Advance Studies and Research Board (ASRB) approves the syllabi and courses offered in these affiliated institutes. To this effect, Bacha Khan University Charsadda, established in 2012, has granted affiliation to a private institution i.e. Institute of Social Policy and Research (ISPaR), Peshawar to start MS program in LIS. Despite the fact the Bacha Khan University Charsadda, has not established LIS department but has granted affiliation to ISPaR making itself distinguished from the rest of the public and private sector universities of the province.

A total of four senior LIS educationalists were interviewed including serving, ex-heads and chairpersons from both public and private sector universities including University of Peshawar and Sarhad University of Science and Technology Peshawar. The reason behind selecting this group of interviewee was to investigate the problem in theory and practice. Since, LIS departments are the nurseries of information professionals and heads/chairperson are the stockholders engaged in designing and modifying LIS curriculum and represent various forums at provincial and federal level for the appointments of LIS professionals in various academic and non-academic organizations. Therefore, it was deemed necessary to obtain their views regarding the modus operandi of CM, prevailing in the university libraries of KPK.

Table 4c.1

Name of Universities/Institutions Providing LIS Education in KPK

S.No	Name of University/Institute	Sector	Program				
5.	University of Peshawar	Public	Bachelor	Master	-	-	
6.	Sarhad University	Private	Bachelor	Master	MS	-	
7.	Institute of Social Policy and Research (ISPaR)	Private	-	-	MS	-	

4c.1 Current Status of CM in the University Libraries of KPK

All LIS faculty members were asked to give their opinions regarding the current status of CM in the university libraries of Khyber. Two faculty members showed their complete dissatisfaction regarding the policies and procedures of CM in the university libraries of the province. They expressed that library professionals in KPK are still stuck to the traditional methods of selection, acquisition, and ordering documents etc. and are not acquainting themselves with the modern techniques of CM. One respondent said that due to the passive attitude of LIS professionals towards adopting modern trends, the monopoly of

faculty has increased in the library affairs specially in the areas of selection and acquisition etc. Though, LIS professionals have been involved in these practices but to the extent of preparing lists of items and sending them to the faculty, order works and record keeping of materials. Only one faculty member who had completed his doctorate degree on the availability of digital resources in the university libraries of Pakistan gave a moderate response and rated the current status of CM in the university libraries of KPK as “Average”. However, he also expressed that the adoption of traditional methods of CM on large scale have marginalized the role and importance of LIS professionals in the university libraries of the province.

4c.2 Effectiveness of University Libraries with Respect to Collection, Services and Facilities in Promoting Research and Academic Activities

The effectiveness of university libraries with respect to collection, services and facilities in promoting research and academic activities received responses like “stands nowhere” “not up to the mark” “totally unsatisfactory” with an exception of one LIS faculty who too expressed that they are satisfactory to some extent.

Most of them expressed that LIS professionals are not playing their due role to improve the situation. Lack of interest has placed a bad impact on their working relationship with faculty and administration. To improve the situation, all of them suggested to the LIS professionals to establish good working relationship with the faculty and administration. Two serving chairpersons suggested the formation of a troika comprising academic staff, administration staff including finance department and LIS professionals of the public and private sector universities of the province to frame and devise CM policies and procedures for the university libraries. They further expressed that harmony among the troika can ensure the uninterrupted growth of libraries with respect to collection, services, facilities continuous flow of budget and other necessary requirements. It was a generally held opinion

that LIS professionals should take the first step in this regard for the sake of their user communities and in the larger interest of their institutions to promote academic and research activities.

4c.3 Collection Management is a Vague Term? Why

Library and information science educationalists were asked to give their opinions regarding the vagueness of the term “CM” among the professional librarians of the province of KPK. The analyses of responses of LIS faculty members represent two opinions i.e. lack of up-to-date LIS curriculum and ineffective role of library associations. One serving chairperson said that it’s all about curriculum. What you teach to a student, will see applied in the field. One ex-chairman expressed that HEC has been trying to develop its own curriculum with the help of library educators and administrators to propose a uniform and standard LIS curriculum in Pakistan. However, there has been a slow improvement in this regards. This issue was also noted during researcher’s informal discussions with the chairperson and senior faculty members of the LIS department, The Islamia University of Bahawalpur who participated in the various meetings of National Curriculum Revision Committee in Library and Information Science of HEC. They showed their concerns that due to lack of interest of faculty members and library administrators the objectives of the National Curriculum Revision Committee in Library and Information Science of HEC have not been achieved at national level. They also shared their experiences that often little participation is observed from the provinces of Sindh and Baluchistan which means that 50% input on LIS curriculum revision/development is not received from the rest of the country. They also expressed that except library schools in the province of Punjab i.e. University of the Punjab, The Islamia University of Bahawalpur and University of Sargodha HEC’s proposed LIS curriculum has not been adopted by any other university of Pakistan in any way.

Mentioning to LIS curriculum, one respondent from the University of Peshawar expressed that the recent amendment in their curriculum took place in 2008 which too was a ditto copy of 2002. This shows a stagnant status of curriculum revision in LIS schools of KPK. This respondent further expressed that at international level standardization in the curriculum and practices is ensured by the library associations like American Library Association (ALA) and Association of College and Research Libraries (ACRL) etc. But the role of local and national library associations and organizations in this regard has been disappointing and ineffective. They unanimously agreed that these issues have created ambiguity among LIS professionals regarding various terminologies including CM.

All faculty members further expressed their concerns that LIS professionals are not keeping themselves abreast with current changes taking places in the field of librarianship. They also mentioned that the concept of CM has broadened with the passage of time and on periodic basis new themes are added which could only be identified/applied if LIS professionals are willing to develop and keep pace with the changing scenario.

4c.4 Collection Development Policies (CDPs)

All LIS faculty members declared CDPs as guiding maps for university libraries which help to guide libraries in the process of selection, acquisition and other CM activities and assist them in decision making process. They also pointed that majority of the problems faced by the university libraries today, can be controlled and solved with the help of a standard CDP. However, at the same time they were not sure about the presence of CDPs in any university library of the province.

They suggested the formulation of standard CDPs for the university libraries of KPK. They stressed on the LIS professionals to ensure faculty and university establishment (Registrar, Treasure etc.) participation in the formulation of CDPs which would enable them to overcome communication gap and get sufficient time to submit and defend their cases

before them. They also expressed their opinions that during the formulation phase, in the absence of local standards, help and guidelines can be sought from the international standards for the development of CDPs.

4c.5 Librarian-Faculty Collaboration for Effective CM

Librarian-faculty collaboration is most important for effective collection development and management activities in the academic libraries. It was noted that both faculty and librarians have different perspective regarding collection development. But there appears to be a high gap of communication between the LIS professionals and teaching faculty, leaving an impact on the CM of university libraries of KPK. All faculty members replied that it is commonly known in the universities that there is a high gap of communication between LIS professionals and teaching faculty.

Who is responsible for this chaos? Three LIS faculty while frankly expressing their views said the “LIS professionals” are responsible for it. With an exception of one who said “both are equally responsible”. They further elaborated that being LIS faculty members they knew many of the professionals who had established part time business. Their priority has never been the library or the users’ community which has been creating a gap of communication and leaving a bad impact on the image of LIS professionals. This gap can only be bridged up with dedication and commitment to library profession. Until and unless LIS professionals do not perform their duties to the fullest of their convection, they will never be recognized, neither in teaching circles nor in their own, said by the LIS faculty members. However, LIS educationalists were optimistic and expressed that the scenario is changing and the new generations are ambitious to improve their education and computer related skills which will ultimately bring changes and leave a good impression on the CM of university libraries in the province. However, it is a mutual responsibility of both LIS

professionals and faculty to work collectively and support each other to achieve the academic goals of their parent institutions.

4c.6 Budgeting and Fiscal Management

Library and information science senior faculty members were asked to provide their views regarding budget cuts on the universities of KPK and its impact on the CM of libraries. Faculty members in the public sector mentioned that due to budget cuts, the universities of KPK are under severe financial problems. One respondent indicated to the serious financial issues of Gomal University D.I. Khan, which is the oldest university of the province, where employees came on roads to protest for the release of their salaries. He further expressed that libraries' financial shares are specified in the universities budget, if universities are not getting finances for employees' salaries how would they financially support their libraries. One faculty member said that deduction in the budget shares of departments has also affected the collection development activities of seminar libraries in the universities.

On the other hand, LIS faculty members in the private sector reported that they were comfortable with respect to finances. Since, private sector universities are not dependent on either HEC grants or federal and provincial budgets and generate own financial resources, therefore, CM activities are running smoothly in the private sector university libraries without any financial breaks and stops.

In response to a question regarding what alternative strategies should be adopted by the university libraries to cope up with the current financial issues? All LIS faculty members suggested different strategies for fund raising and resources generation in the university libraries. Their proposed strategies included collection of library securities; library registration fee for non-members, payment-based photocopying and scanning services, book bank schemes, and the establishment of contacts and agreements with the donor/funding

agencies. Two faculty members also expressed that PLA should come forward to take up the issues of budget cuts on libraries with the HEC and concerned university authorities.

One former chairperson also said that the head supports and takes every necessary step needed for the betterment of a family. Why don't Vice Chancellors being heads of the universities take up this issue with HEC and HED at federal and provincial levels? Basically libraries are the heart of universities providing life blood to the academic life. Therefore, all necessary strategies should be designed by the administrative stakeholders of the universities to keep this blood flowing. He further expressed his views that LIS professionals should also play their part, assisting them in their plans. They should think about library friends, well-off people who can donate money etc. The adoption of such kinds of strategies can help libraries to overcome financial issues, proposed by LIS faculty members.

4c.7 Bibliographic Access and Marketing of Collection to the Users

In response to the question of access to information resources, all LIS faculty members unanimously expressed that in this digital environment one can access information on finger tips via mobile, laptops and other smart devices. Therefore, all of them were in favour of both physical and online access to library collections.

Regarding the question of marketing library sources and services, most of them suggested various marketing strategies including exhibitions, seminars and the arrangements of information literacy programs. However, they necessitated the need of arranging trainings and orientation sessions in each university department to market library collection and services on wider scale to the user community. They highlighted that this is the only way to ensure maximum participation and educate more students and faculty members which would ultimately maximise library use. They were also in favour of organizing of seminars and workshops to market library collection and services but according to their

personal experience the participation rate in such kinds of events are very low as compared to the former methods.

4c.8 Research Based Ranking System of Universities and the Roles of University Libraries

All LIS faculty members were aware of the Research Based Ranking System of HEC. This is a kind of system in which universities are ranked according to their research productivity. They said that university libraries play major role in stimulating research and academic activities and mentioned a co-relation between the effectiveness of library collection, services and research production.

Most of them were of the view that this ranking system has brought multiple challenges and opportunities for the university libraries. They also asserted that Research Based Ranking System will make information professionals' roles more prominent and exposed. They further highlighted that LIS professionals should be skilful enough to encounter any challenge in respect of accessing information through latest computer devices. Many of them also termed this system an opportunity for the LIS professionals to test and prove themselves and contribute towards developing research culture in the universities and remove the black sigma on their job and change the opinions and perceptions of majority of the people who think LIS professionals do nothing.

4c.9 Resource Sharing Programs

Senior LIS faculty members' opinions were sought on the absence of resource sharing programs in the university libraries of KPK. All of them knew that resource sharing programs are not available in the university libraries. However, they also expressed that dwindling budgets, rising cost of books and journals and continuous recession in the economy of Pakistan has necessitated the importance of resource sharing programs among the university libraries of Pakistan. They suggested to the LIS professionals to prepare

electronic catalogues and upload them on institutional websites which would also take the shape of an OPAC to assist own as well as other institutions' library users in search for information. Most of them stressed on the LIS professionals and faculty to realized the importance of resource sharing programs in the current era. Two faculty members suggested to the LIS professionals to take an immediate initiative in this regard.

4c.10 Information and Communication Technologies, Electronic Resources and HEC Digital Library Programs

Library and Information Science faculty members' opinions regarding the impact of ICT, electronic resources and HEC Digital Library on the CM activities were noted. They expressed a complete satisfaction regarding the positive impact of ICT on the CM activities of university libraries. They mentioned that access to electronic resources and ICT has assisted LIS professionals and especially collection developers in their tasks of selection, acquisition, online selection, online order placement, online transaction etc. and can perform many other functions in an online environment. In the coming times they expected it to go on developing as the mode of access to information has changed tremendously.

4c.10.1 HEC Digital Library Program and its Impact on the CM of University Libraries

All faculty members said that through HEC Digital Library users can have access to a tremendous collection of resources. They also mentioned that it in itself is a complete library. However, how to operate it and access its resources required users' education. Through information literacy programs, all users will be able to operate and get access to HEC Digital Library resources, they said. Faculty members also expressed their views that though; the usage of HEC Digital Library has been low but with the adoption of some suitable kinds of marketing strategies, its holdings can be made popular among the users'

communities. It plays a big role in promoting research and accessing international peer reviewed journals and books, otherwise it could not have been accessed.

HEC Digital Library has given relief to LIS professionals to perform hectic collection development activities in libraries. Furthermore, its contents are freely available to the universities and other non-profit organizations, which have placed a good impact on the financial issues of university libraries in Pakistan.

4c.11 Needed Competences for Professional Librarians

All LIS senior faculty members suggested that LIS professionals should come forward and play an active role to promote LIS profession through dedication and commitment. Most of them mentioned that LIS professionals should have good IT and communication skills, vibrant to convince administration and leadership qualities.

4c.12 Summary of the Qualitative and Quantitative Data

Analyses of the data reported in this chapter reveal that LIS professionals in the university libraries of KPK adopt variety of traditional CM strategies in isolation to fulfil the information needs of the users. Holding discussions with the faculty members was the prime method of assessing users' needs which means that a large portion of collection is built on the recommendations of the teachers in the public and private sector universities of the province. This too reflects that LIS professionals seem to have surrendered their rights of selection and acquisition to the faculty members, restricting themselves to order works and record keeping only. More than 50% of the university libraries make selection of library materials without selection teams comprising LIS professionals, faculty and administration. Furthermore, senior LIS professionals often participate in the selection process of library materials. In 27% university libraries administrative staffs including registrars, deputy registrars and the vice chancellors take charge of selecting library materials excluding LIS professionals from the process. This situation demonstrates lack of coordination among LIS

professionals, faculty members and university administration which seems to have marginalized LIS professionals' roles to facilitators than stakeholders in the process of selection and acquisition of library materials.

The analyses of data further show a complete absence of collection development and management policies in the university libraries of KPK. It was observed that in the absence of formal written collection development and management policies, most university libraries have adopted some type of documents containing independent random procedures for selection, acquisition, weeding and other library activities. University libraries in KPK also provide bibliographic access and adopt promotion strategies for both traditional and electronic resources in a limited range. Weeding of library materials and resource sharing are the less developed areas of CM in the university libraries of the province. Almost all university libraries follow traditional procedures of CM to fulfil the educational and research needs of the users. Collection management activities in the province are influenced by various factors including budget, faculty, and administration, lack of resources and inactive role of library management.

Library and information science professionals mentioned their efforts for the formulation of CDPs; however in this regard their roles looked more of a forwarding agency because they do not pursue their cases later on or take up library related important issues either with university administration and faculty members on various institutional forums. According to LIS professionals' faculty and administration are responsible for this mess; however, senior faculty members expressed their concerns that LIS professionals are not keeping themselves abreast with current changes taking places in the field. They also mentioned that the concept of CM has broadened with the passage of time and on periodic basis new themes are added which could only be identified/applied if LIS professionals are willing to develop and keep pace with the changing scenario. This situation indicates LIS

professionals' passive attitude and lack of dedication towards discharging their professional duties and profession which is why things are in a standoff since years.

The applications of ICT and access to electronic resources seem to have placed an impact on the traditional policies and procedures of CM in the university libraries of KPK. Library and information science professionals were aware of ICT applications and their usefulness in various CM activities; however these applications have yet to take a prominent place in the policies and procedures of CM in the university libraries of the province with the passage of time.

Despite many problems and issues, HEC Digital Library has placed a tremendous impact on the traditional policies and procedures of CM in the university libraries of KPK. However, due to poor marketing strategies and lack of information and digital literacy on the part of the users, HEC's Digital Library's resources are under-used.

The study found a dissatisfactory level of users with the policies and procedures of CM in the university libraries in fulfilling their information needs effectively. The reason behind this is the absence of proper CDPs, communication gaps in the working relations of faculty and LIS professionals, their inactive roles, financial and administrative issues. Because of these issues and challenges university libraries of KPK are unable to build an effective collection according to the needs of the user community and keeping in view the objectives of the institutions. Library and information science professionals and LIS academicians were fully aware of the challenges and issues of CM in the university libraries of the province. However, despite numerous technical, procedural, psychological and attitudinal issues, LIS academicians specially stressed on the professionals to develop their administrative skills, knowledge of ICT and establish good working relationship with the faculty, students, researchers and administration and adopt contemporary CM strategies to fulfil the educational, research and information needs of the users.

Chapter 5

Summary of the Findings, Conclusions and Recommendations

This chapter presents summary of the findings of study, conclusions and recommendations to improve the status of collection management in the university libraries of KPK in particular and Pakistan in general.

5.1 Scope and Conduct of the Study

The main objectives of this study were:

1. To investigate collection management (CM) policies as well as procedures adopted by the university libraries of Khyber Pakhtunkhwa (KPK), Pakistan.
2. To study the impact of ICT, electronic resources and HEC Digital Library on CM in the university libraries of KPK.
3. To explore issues and challenges of CM in the university libraries of KPK.
4. To study the level of users' satisfaction with CM policies and procedures adhere to by the university libraries of KPK.
5. To recommend practicable guidelines for CM in the university libraries of KPK.

Keeping in view the objectives of the study, survey research method was adopted for data collection from the target population dispersed throughout the province of KPK. Using mixed method research approach, questionnaires were used as a major survey tools for quantitative data collection, coupled with semi structured interviews to complement, supplement and increase the validity of the data and get sustainable results.

The study was conducted in three phases. In the first phase, a comprehensive literature review was carried out for the better understanding of technical aspects of the study, broadening conceptual breadth about various aspects of CM and to develop a conceptual framework. The extensive literature review led to the second phase of the study i.e. the development of survey instruments. In the third and final phase quantitative and

qualitative data were collected with the help of survey instruments. The collected data were then quantitatively and qualitatively analysed to reach at conclusions.

The survey include all universities of KPK, both in public (N=17) and private (N=9) sectors which were established and recognized by the HEC till 31st December, 2012. Self-completion questionnaires were used to collect quantitative data from the central libraries of the main campuses of universities. Data about users' satisfaction regarding the effectiveness of CM policies and procedures were collected from faculty members who were purposively selected, including 10 each from the 26 universities of the province. In total 260, (77%) responses were received and analyzed quantitatively. Many follow up letters, emails, telephonic calls and personal visits made the achievement of targeted response possible. Semi-structured in-depth interviews were conducted with 25 chief/senior LIS professionals and 4 senior LIS faculty members/chairman/chairpersons. Sampling in this case was purposive in nature.

Members of the library committees were planned to be interviewed. However, this group constituted the limitation of this study. Though, universities had subject experts and book selectees but none of the university in the province had formal library committees comprising faculty members, library management and administrative staff.

5.2 Findings Related to the Research Questions

The study tried to answer five main research questions. Major findings regarding the research questions are as follow:

Research Questions 1&2: Policies as well as Procedures of CM Adopted by the Public and Private Sector Universities' Libraries of KPK

In this study the words policies and procedures of CM were used in broader sense with practical application, covering collection development and a suit of extended activities related to CM.

The overall analysis of the data shows that university libraries in KPK follow traditional procedures of CM in isolation to fulfil the informational, educational and research needs of their users' communities. The findings related to the policies and procedures of CM are as under;

5.2.1 Assessing Users' Needs

Various editions of the works on collection development and management, Evans and Saponaro, (2012, 2005, & 2004) and Johnson, (2014, 2009 & 2004) suggest that library services and collections should be developed according to the information needs of the users' community. The results of quantitative and qualitative data show that both public and private sector universities assess users' needs for collection development and management in limited range by employing a variety of methods including surveys, study of syllabi, awareness of teachers and researchers' field of specializations, current research projects in the universities, and circulation statistics. "Assessing users' needs provide strong basis for effective CM" was a common notion of all LIS professionals. In order to build an effective collection for users' community, majority (80%) of the library professionals prefer to hold discussions with heads/chairpersons. This means that a large portion of collection is developed on the recommendations of the faculty members. These findings are concurrent with the proclamations of Gregory (2011) where he states that in academic libraries LIS professionals might interview teaching faculty including deans, heads, and chairpersons who are usually considered as the key informants about the information needs and interests of the users' base. These results are similar to the findings of the study of Ameen (2004) where she found that most of the library materials in the university libraries of Pakistan are selected on the recommendations of the faculty. These findings simultaneously reflect a stagnant situation in the university libraries of Pakistan and shows that after a time period of one decade (2004-2014) things are the same and unchanged.

The qualitative data analysis further indicated that user' needs assessment projects in the university libraries of KPK are influenced by various factors including lack of budget, lack of cooperation from faculty, students, administration and lack of policies and resources, and acquiring foreign materials, lack of reputed vendors and inflation etc. However, bad economies of university libraries in the province has been the most significant and influential one.

5.2.2. Collection Development and Management Policies

Collection development and management policies have proven valuable for collection development and management LIS professionals. These policies guide libraries to carry out their central tasks of acquiring, organizing, and managing library materials. Collection development policies typically set up general framework for establishing the library's collection goals, in terms of both new acquisition and the maintenance of the existing items and ensures consistency in the procedures of libraries (Gregory, 2011; Lorenzen, 2009; Harte, 2006). However, the reports of qualitative and quantitative data analyses of the current study show a complete absence of collection development and management policies in the university libraries of KPK. Out of 26 universities only one university "Shaheed Benazir Bhutto University" mentioned the presence of an adopted written CDP. But, when examined, it was a document describing purchase rules etc. only.

The literature shows numerous references in support of formulating written CDPs to meet the challenges of libraries and community needs more effectively. The study found substantial support for the written CDPs in the university libraries of the province. Library and information science professionals working in the university libraries of KPK were serious about the formulation of written CDPs where efforts had been initiated. However, lack of cooperation/coordination from the faculty, administrative problems with the

university authorities and lack of resources in the library are the main issues hindering the formulation of written CDPs.

All senior LIS faculty members also suggested the formulation of standard CDPs for university libraries in KPK. They stressed on LIS professionals to take faculty and university establishment into confidence in the formulation of CDPs. They hoped that the formulation of a standard CDP would help LIS professionals to overcome multiple problems. These findings are similar to the results of the studies of Ameen 2004 and 2006, who found that 90% of the LIS professionals were in favour of written CDPs in their university libraries. These studies further found that proper guidance, training and encouragement from faculty and university administration are required to the library management to take initiatives in this regard.

It was noted that in the absence of formal written CDPs, university libraries in KPK have some type of non-documented traditional procedures for collection development and management activities. These findings are concurrent with the results of the studies of Ameen, 2004 and 2008b; Ameen and Haider, 2007a and Haider, 2007b that university libraries in Pakistan had some documents containing purchase rules, guidelines about book loss, weeding and general library rules but no clearly laid down CDPs.

5.2.3 Selection of Library Materials

Review of literature shows that sound book selection policies and practices devised from the information needs of the users' community play fundamental role in the development of a strong book collection. Results of the current study show that university libraries in KPK adopt a variety of methods for selecting library materials. These methods include selection through purchase committees, centralized selection by the central libraries and decentralized selection where departmental libraries select materials and send their

demands to the central libraries for acquisition. However, the analyses demonstrate centralized selection procedures more prominent and dominating in the universities of KPK.

Analysis of the qualitative and quantitative data demonstrate that universities libraries in KPK make selection of materials for various purposes where both traditional and electronic materials are selected to fulfil the information needs of the users' community and for recognition and accreditation requirements of HEC and affiliation granting councils and associations i.e. Pakistan Medical and Dental Council, Pakistan Bar Council, Pakistan Pharmacy Council, and Pakistan Engineering Councils etc.

The study found lack of coordination among LIS professionals, faculty members and university administration in the process of selection. The role of LIS professionals in the whole selection process is more of facilitators, providing books selection aids and publishers' catalogue, entertaining order works and record keepers than stakeholders. The findings also show faculty's influence on the selection of materials which sometimes brings unnecessary delays in the process because of their additional academic and administrative assignments. The current study predicts its negative impact on the policies and procedures of CM in the university libraries of KPK. These results are concurrent with the findings of the study of Ameen and Haider (2007c) that faculty members play a major role in the selection of books whereas LIS professionals' role are merely of facilitators, providing faculty members catalogues, booklists or books on approval. During the qualitative data analyses it was observed that LIS professionals generally consider faculty to be well aware of their students' information needs and therefore they can select titles for students and themselves. The major role of faculty in the process of selection of library materials creates serious problems. They usually remain busy in their educational and administrative engagements and may not consider it as their major responsibility and therefore could take longer to make selection decisions. By the time LIS professionals get approval from faculty

they may hardly get the required quantity of books on the approval list because the titles might have gone out of stock in the market by then.

Library and information science professionals expressed deep concerns on the budget cuts, drastically affecting their library selection procedures. It was noted that the infiltration of electronic resources has brought many opportunities for the LIS professionals with many challenges. These confirm Crawford (2009) statement that bad economies and infiltration with technology have placed an impact on the resources and services of libraries. Despite the fact that traditional collection is easy to select and much popular among the users, LIS professionals also reported that tendency of their library users towards electronic materials has been on the rise, making room in the selection policies and procedures of university libraries in KPK. These findings also confirm the results of the study of Khan (2013) who found that users' reliance on electronic resources in the university libraries of KPK have increased.

5.2.4 Acquisition of Material.

University libraries all over the world acquire and maintain book collection parallel to other formats. Despite debates on the future of printed collections in the digital age, printed books still have importance in the libraries' collection development (Ameen, 2005, Carr, 2007). There have been many discussions on the issues of access versus ownership or access versus acquisition in the current digital environment. However, acquisition of printed materials is still of great importance in the university libraries. Findings of the study show that most of the materials in the university libraries of KPK are acquired through purchases. Out of 26, only two public sector universities reported the acquisition of research journals through exchange programs.

It was noted that university libraries in KPK mostly acquire library materials through local bookseller and supplying agencies, visiting bookshops and book fairs/exhibitions. The

trend of acquiring foreign books and journals through local booksellers is the most convenient and popular among the universities of the province. The tendency of acquiring foreign materials directly from abroad is low. This is, however, opted in case a reading material is urgently required and is unavailable in the local markets in Pakistan. These findings are concurrent with the results of the studies of Haider (1975, 1986, and 1998) which found that university libraries in Pakistan purchase most of the reading materials including foreign literature from the local market and this is the most popular method of book procurement in the country.

A review of local literature indicates that the focus of many discussions related to CM in the university libraries of Pakistan have been on the insufficient size of collections and the problems of acquisition. Library and information science professionals indicated different problems which hinder the acquisition of materials in the university libraries of the province. They specifically mentioned that due to financial constraints and unstable position of Pakistani rupee, the acquisition of their library materials has received a major setback.

5.2.4.1 Gifts and Donations

Gifts bring individual items or collection of items to a library. Johnson (2009) notes that gift materials strengthen the holdings of libraries, fill gaps, supply replacements and help libraries to get those materials which are not available and affordable for them through purchase. This is why gifts are the next most important sources of acquisition in the academic libraries. Clayton and Gorman (2001) also noted that gifts are the important way of acquiring library materials in the developing countries of the world. All university libraries in KPK accept gifts and donations without any policy. Only three university libraries in the province have policies for accepting gifts and donations or otherwise. This means that 26 universities of the province are following this practice without any policy. However, Johnson (2009) states that policy is mandatory for handling gifts in the academic

libraries which would help LIS professionals to exclude and accept inappropriate and irrelevant materials.

Results of the current study indicate that monetary assistance has not been received by any public or private sector university library of the province for collection development and management. The overall analyses show that university libraries in KPK receive different kinds of materials including books and non-book materials in the form of gifts and donations. However, books are the major form of gifts received than any other form. These findings affirm the results of Ameen (2004) who noted that books are the major form of gifts, received in the university libraries of Pakistan.

5.2.5 Budgeting and Fiscal Management

Academic libraries within the universities are the gate ways to information. Rasul and Singh (2010) observed that university libraries are now paying greater attention to fulfil users' needs and support institutional missions and objectives by developing appropriate policies by allocating handsome amount in budget to facilitate research. However, in the last few decades, academic libraries within the universities have had difficulties in keeping up with users and institutional expectations and demands due to budget constraints. Rowley and Black (1996) noted that academic libraries are striving to continue to do what they did in the past and even do more with no additional resources and financial support. However, amongst the greatest problems facing academic libraries are that collection development programs for published materials cannot be brought to fruition due to high rate of inflation, escalating costs of print journals and books, declining funding from the parent institution (Fourie, 2001; Evans and Saponaro, 2012, 2005).

Information about institution's total budget allocation during the period 2008-2012 for library collection development and other requirements were provided by 14 universities. The rest of the universities did not provide the required information. Most of the LIS

professionals were unaware of their libraries' annual budgets. However they provided approximated allocation/figures for their library collection development and management activities based on past experiences in their institutions.

It was noted that finance/treasury departments of the universities have a great influence on the budgetary and fiscal management of libraries. On the other hand LIS professionals have no role in the budget preparation of their libraries. Most of them are unaware about their annual budget allocations. Their roles are just to prepare lists of requirements/required materials and sending it to the administrations/finance departments for approval. During interviews they also complained that their demands are never fulfilled by administrations/finance departments accordingly.

Out of 26 universities, nine informed about the collection of library securities from their users. However, the amount collected under this head was limited and insufficient. Moreover, these securities were refundable and therefore it had no role in the collection development and management activities of the university libraries of KPK.

The study found weak funding policies of the universities where insufficient, irregular and random budget are allocated for libraries without any formula. This fact was also noted by the studies of Haider (2007b), Mahmood, Hameed and Haider (2005), Mahmood, Hameed and Haider (2006) that funds to the university libraries in Pakistan are allocated without any formula and this has been the main reason behind their tight financial position. Though, a weak financial position of both public and private sector university libraries were noticed, however, there is an edge to private over public sector in this regard. It was noted during the interviews with the LIS professionals of the private sector that since they were not dependent on the grants of HEC, federal and provincial governments or any

other funding bodies and generate their own funds therefore, comparatively they are under less financially burdens than the public sector universities.

The overall analyses show an unstable and weak financial position of the university libraries of KPK, leaving an adverse effect on the collection development and management activities of libraries.

5.2.6 Bibliographic Access and Physical Preparation

Data show that all public and private sector university libraries in KPK provide access to library materials in traditional ways. Most of the universities with large collection and staff strength have appointed technical staff i.e. classifiers and cataloguers for the physical preparation of library materials. But there has been a growing shift of university libraries in KPK towards electronic and digital resources. However, this shift is because of the HEC Digital Library. Almost, all public and private sector universities access electronic and digital resources via HEC Digital Library.

The study found that though collections in the university libraries of the province comprise of printed collections including books and journals however, HEC Digital Library has provided access to millions of digital collections. These results justify the findings of the studies of Khan and Ahmed (2013) and Khan (2013) where they found that HEC Digital Library have been providing access to international scholarly literature including peer reviewed journals, e-books and databases across a wide range of disciplines.

5.2.7 Promoting the Collection to Users

The interest in marketing has tremendously increased in the last many years in the field of librarianship. Asghar and Bhatti (2014) and Asghar and Bhatti (2012) found that despite lack of policy and mission statements, LIS professionals in Pakistan have a positive attitude towards adopting marketing strategies in their libraries for collection and services. The analyses of the data illustrate that university libraries are using traditional methods for

marketing library collection and services. These methods include orientation programs, sending/dispatching/circulating the lists of new arrivals to the respective departments for display on notice boards and displaying lists of new arrival on the main entrance of the central libraries. These finding justify the results of Asghar and Bhatti (2012) where they found that traditional techniques are mostly applied to promote library collection and service in the academic libraries of Pakistan. Findings of the study also show the applications of modern techniques and technologies including the usage of institutional websites, library webpages, email alerts and applications of social media (Facebook) for the promotion of library collection and services. Though, a slight proportionate of libraries reported the use of these applications. But it shows a trend of university libraries towards the adoption of modern technologies. These results validate the finding of Khan and Bhatti (2012) that Pakistani LIS professionals have moved towards adopting modern techniques (social media) for the promotion of library collection and services. Analyses of the data also indicate that university libraries in KPK are passing through a transitional phase which indicates the application of more modern trends in future.

5.2.8 Evaluation of the Collection

Assessment and evaluation of collection is a part of effective CM in libraries. Johnson (2014, 2009) calls it a method of measuring the quality and utility of collection in terms of satisfying users' needs effectively. In the past, according to Clayton and Gorman (2001) the worth of libraries was determined on the basis of their collection sizes. Though, large sizes are not always guarantee of better libraries. However, Ameen (2004) found that "the bigger the better" concept about the size of collection still prevails in Pakistan. She noted that libraries in the universities of Pakistan are not evaluated on the basis of their collection utility or effectiveness and neither there has been any accountability from the higher authorities in this regard. Agee (2005) states that collection evaluation provides

sound foundation for collection development. However, the culture of collection evaluation is still less developed in Pakistan. From the results of this study it generally appeared that university libraries in KPK carry out evaluation of traditional and electronic collection in some way. Though, the culture of evaluation of physical and electronic collection seem to have less developed in the university libraries of the province, however, there appears a tendency of LIS professionals toward the sensitivity of this issue. It was noted that six university libraries assess and evaluate electronic collection with the help of IT experts, analyzing network usage analysis, vendors, reports and webpages and database hits etc.

The overall analyses show that, university libraries in KPK apply a variety of formal and informal methods to evaluate, assess and get feedbacks on the collection but still the culture of formal collection assessment and evaluation has not developed as yet which validate the offer mentioned statements of Ameen (2005).

5.2.9 Weeding (De-selection)

A good deal of literature is available on the need and importance of weeding in the academic libraries. But despite much advocacy in the literature, university libraries in KPK do not give much attention to withdrawal rather much emphasis is made on building and maintain collections not culling them. The study found that 46% of the university libraries in KPK with large collections conduct weeding at minimal levels for the purpose to provide up-to-date (12, 100%) materials to the users, create space (12, 100%), and make room for the new materials (11, 92%). Among other factors, circulation statistics was the most common determinant of weeding library materials in the university libraries of KPK.

The analysis of qualitative data show that the reason for not carrying out weeding or conducting weeding on limited scale has been the absence of weeding rules, opposition from faculty and administration, lack of budget and human resources. Apart from it, the size of collection and space of libraries were also among the important factors for weeding, because

most of the libraries had adopted it to overcome space related issues which confirm Johnson (2009) statement that weeding is usually done to maximize space and improve library's collection and services.

5.2.10 Cooperative Collection Development, Inter Library Loan and Resource Sharing

A huge body of literature is available on the need and importance of cooperative collection development; inter library loan and resources sharing. However, the situation in the developing countries of the world is not encouraging in this regard. The review of literature published in Pakistan presents a gloomy picture of cooperative collection development; inter library loan and resources sharing programs Ameen (2004), Khan (2005), Hanif (2005), Ansari (2005), Mirza (2005), Asjad (2007), Ilyas (2007), Jaswal, (2006), Haider (2003), Ahmed (1996/1997), Attaullah (1991), Begg (1980), (Hanif, 1987, 1988, 1988), Jaswal (1990), Khalid (1997), Khan (1991), Khan (1995), Khan, (1996), Khurshid (1982), Khurshid (1987a), Khurshid, (1990), Majid, Eisenschitz and Anwar (1999), Mohajir (1989), and Sharif (2006), Kaul, (1999), Khurshid (1974), Kohi, 1997), Nitecki and Renfro (2004), Samdani and Mahmood (1999), Shreeves (1997). Haider (2003) noted that though, there have been encouraging efforts from the LIS professionals to produce literature on this issue, however, according to him, these efforts are more based on theories than practice. The current study demonstrates a complete absence of cooperative collection development; inter library loan and resources sharing programs among the university libraries of KPK. All LIS professionals seemed possessive about their library collections because of administrative, audit and accounts related issues. The study found an isolated position of each university library and professionals, restricted to their own domains. These findings justify the results of the study of Khan (1991) where he found that formal cooperation among the university libraries of Pakistan in nonexistence. This also

affirms Haider (2003) statement that cooperative collection development; inter library loan and resources sharing is the untouched aspect of Pakistani librarianship.

Few LIS professionals informed about their engagements in exchange programs at local and national levels and that too were limited to the exchange/give and take of institutional publications i.e. research journals and magazines or exchange of electronic materials on reciprocal basis through personal contacts. The study of Khalid (1997) also found that cooperation among the university libraries of Pakistan exists through personal contacts. However, despite being unengaged in the resource sharing programs, all LIS professionals of the province were aware of its need and importance to overcome/reduce the cost of library materials in the prevailing dwindling budgets and high expectations of users' community.

5.2.11 Preservation and Conservation Strategies

Evans and Saponaro (2012, 2005, and 2005) have given complete details on the issues of preservation and conservation in libraries in their texts. The current study found that most of the university libraries are following traditional methods of preserving library materials. All public and private sector university libraries mentioned using binding a major preservation strategy for their library collections. Microfilming was mentioned by two public sector universities namely University of Peshawar and Islamia College University Peshawar. Since, these universities have rare book collection in their libraries, and often manuscripts are in poor condition and inadequate storage and poor environment causes further deterioration to them, therefore, these universities might have adopted this strategy to protect their rare book collection from misuse or mishandling.

During the interviews it was also noted that some university libraries were keeping tobacco leaves in cupboards, using pesticides, and cleaning shelves with kerosene oil for collection protection. Digitization of library collection is a latest phenomenon for the

university libraries of KPK. None of the university has adopted this strategy for the preservation of library materials.

The analysis of qualitative data showed high concerns of library administration towards the preservation and conservation of library materials. Though, limited and traditional but according to the local environment, proper security measures have been taken for collections and library buildings.

Research Question 3: The Impact of ICT, Electronic Resources and HEC Digital Library on Collection Development and Management in the University Libraries of KPK

5. 2a: The impact of ICT and Electronic Resources on CM in the University Libraries of KPK

The library environment is currently undergoing a rapid and dynamic change. Advances in computer technology combined with communication technologies have exerted pressure on libraries to satisfy users' needs effectively. Information explosion has placed an impact on the tradition CM procedures of academic libraries including acquisition, processing, storage, retrieval and dissemination of information (Jabeen & Khan, 2014). Recent developments in ICT, use of web technologies and electronic resources has brought about a revolutionary change in the library's landscape. It has affected the selection and acquisition process of collection development. Collections are changing relentlessly from print to digital and electronic format. Since, electronic resources have become important research tools and users preferences have also increased for them (Gregory, 2011; Dadzie, 2005), therefore, these resources must be a part of collection development process of academic libraries in Pakistan.

The current study reports a positive and revolutionary impact of ICT and electronic resources on the users, faculty, staff and financial management of university libraries in

KPK. The applications of ICT were adopted by most university libraries of the province for various CM activities including evaluation of collection, preservation and controlling book theft. Fifty per cent of the university libraries reported that the applications of ICT and access to electronic resources have assisted and facilitated their selection and acquisition procedures. These university libraries also mentioned that the applications of ICT and access to electronic resources are useful in the formulation of OPAC, facilitate cooperative activities, provide instant access and delivery of information and frame a uniform CM policy and the formulation of consortia at local level. Library and information science professionals also expressed that these facilities satisfy the multidimensional information needs of users than print sources by providing remote searching facilities. It was also observed that the attraction of electronic resources has much increased due to budget cuts on the university libraries of the province. However, it is contradiction to Gregory (2011) that electronic resources have affected collection development budgets in the academic libraries.

The analyses of data show a tremendous effect of ICT and electronic resources on the policies and procedures of CM in the university libraries of KPK. However, a comparison of public and private sector universities show that the impact of ICT on various CM activities like selection, acquisition, access, financial issues, consortial planning, and administrative responsibilities of the library staff, CM policies and access to electronic resources are more prominent in the public sector universities of KPK than the private sector. Kasalu and Ojiambo (2012) noted dissimilar kind of findings while studying a private sector university library of Kenya. Furthermore, studies conducted in the local environment also confirms that the applications of ICT and access to electronic resources have placed a good impact on the higher education sector of Pakistan (Bhatti, Asghar and Chohan, 2014; Bhatti and Amjid, 2013 and Khan and Bhatti, 2012)

5. 2b: The impact of HEC Digital Library on CM in the University Libraries of KPK

Bhatti, Chohan and Asghar (2014) while accessing HEC Digital Library collection found that its main objective is to support and strength the learning activities of researchers in Pakistan where they can access a wide range of authentic resources across multiple disciplines. The HEC Digital library has supplemented printed resources and facilitated various CM activities in the university libraries of Pakistan. Findings of the current study demonstrate similar kind of impact of HEC Digital Library on the policies and procedure of CM in the university libraries of KPK. These include improved use of electronic resources, resolving the issues of selection and acquisition of library materials, stimulation of research despite financial constraints in the universities, fast access to information, preservation, conservation and digitization of library materials, supplemented print resources, and serve multidiscipline at one place and time. Furthermore, access to HEC Digital Library has reduced library staff burdens, solved weeding and space related problems and has ensured the establishment of resources sharing and collaborative programs among the university libraries to assist users in their search for information.

Data show that out of 26, 19 universities mentioned that HEC Digital Library serves multidiscipline at one place and has resolved space related issues in libraries followed by 16 (69%), university libraries where HEC Digital Library has solved problems of materials selection, acquisition and financial issues. Fifteen libraries reported that it has reduced library staffs burdens and provides state of the art latest information to the user community in the form of books and journals than provided by print materials. Thirteen universities reported that HEC Digital Library has stimulated research activities in their universities by providing fast access to information of all disciplines. During interviews 20 LIS professionals expressed that access to HEC Digital Library has stimulated research in their universities which in turn improved their position among the HEC university ranking

system. The studies of Khan (2013) and Khan and Ahmed (2013) also found that HEC Digital Library provide electronic access to a wide ranges authentic e-resources across disciplines and is therefore, popular among the researcher for their various research related endeavours in the universities of KPK.

The overall analyses show that HEC Digital Library has placed a tremendous impact on the policies and procedures of CM in the university libraries of KPK.

Research Question 4: Issues and Challenges of CM in the University Libraries of KPK

5.3a.1 Issues and Challenges in Users Needs Assessments

The study found several issues and challenges in the process of users' needs assessment projects in the university libraries of KPK. The issue of budget was mentioned by majority, 50% of the libraries followed by lack of cooperation from administration, faculty members and students' communities, adversely affecting the process of users' needs assessment. The data show that most of the problems in the area of users' needs assessments are faced by the public sector universities including lack of cooperation from faculty members, students, administration, human resources and other library resources and lack of interest of library management which are necessary for effective users' needs assessment projects. Bhatti (2010) while evaluating user education programs in the university libraries of Pakistan also found similar kinds of issues. She noted that user needs are not properly and regularly evaluated by the library administration in Pakistan. However, she observed that since users are not informed about the aims and objectives of users' needs assessments projects by the library administration, therefore, they often participate in such kind of activities. In another study, Asghar and Bhatti (2012) suggested to the library management of the university libraries of Pakistan to assess their users' needs regularly and systematically for effective collection development and users' satisfaction.

5.3a.2 Issues and Challenges of Collection Development Policies (CDPs)

The study found that all university libraries in KPK are working without formal written CDPs. Though, LIS professionals consider CDPs as guiding maps and were serious about their formulation where initiative had been taken by them. However, lack of proper interest by library management in perusing and persuading their cases later on with the university administrations, insufficient efforts by LIS professionals towards realising their active role for the formulation of written CDPs, absence of proper library committees, lack of coordination from the faculty, administrative problems with the authorities and lack of resources in the library are the main factors affecting the formulation of written CDPs. Ameen (2006, 2004) and Haider (2007) suggested in their studies that LIS professionals should initiate the formulation of standard CDPs with the help of administration and academic staff associations in the universities of Pakistan. Library and information science academicians also stress on professionals working in the higher ranks of the university libraries of KPK to join hands and take their respective university administrations and academic staffs into confidence to formulate a standard CDP for the university libraries of the province. Mangrum and Pozzebon (2012), Gregory (2011, 2006), Johnson (2009, 2004), Kennedy (2006), Vignau and Menses (2005) also suggest that CDPs are important tools for academic libraries and can definitely help LIS professionals to minimize their maximum problems.

5.3a.3 Issues and Challenges in the Process of Selection of Library Materials

The quantitative and qualitative data regarding selection procedures in the university libraries of KPK show LIS professionals' roles more of facilitators than decision makers". Information professionals seem to have surrendered their rights in the process of selection, restricting themselves to order works only. More than 50% of the university libraries make selection of library materials without selection teams comprising library

professionals. Furthermore, senior LIS professionals working in the higher ranks often participate in the process of selection of library materials. In 27% university libraries administrative staffs including registrar, deputy registrars and the vice chancellors take charge of selecting library materials excluding LIS professionals from the process. These findings affirm the results of the various studies conducted in the Pakistan. Ameen and Haider (2007c, 2004 and 2005) noted that LIS professionals do not have a balance role in the process of selection of materials in the university libraries of Pakistan. The overall analyses of the study indicate little role of LIS professionals in the process of selection and further indicate lack of coordination among LIS professionals, faculty members and university administrations.

Other issues and challenges included budget cuts on the university libraries, inclusion of foreign books and the unavailability of up-to-date lists in the local market and the inflow of electronic resources which has also brought challenges for the LIS professionals in the university libraries of KPK. Ameen and Haider (2007c) suggested the need of better liaison among the LIS professionals and teaching faculty for in time and quality selection of library materials in the university libraries of Pakistan.

5. 3a.4 Issues and Challenges in the Process of Acquisition

Local literature depicts that acquisition practices in the university libraries of Pakistan have not changed since long. The current study found that there is absence of acquisition policies in most of the university libraries of KPK. Only 3 university libraries reported the presence of written acquisition policies. Out of 26 universities only 4 in public and 1 in the private sector reported the presence of acquisition departments. It was noted that most of the foreign materials are acquired through local publishers with issues of exchange rate, destabilized position of Pakistani currency, complications of import policy and custom clearance at airports etc. which was also noted by Haider (2007b).

It was noted that the acquisitions of library materials are controlled by faculty and administration. Most of the LIS professionals during interviews expressed their concerns that all reading materials are selected and acquired by the faculty members and administration without taking LIS professionals on board. The roles of LIS professionals are merely limited to record keeping i.e. accessioning, computerized record management, classification and cataloguing etc. and order works only. Seven senior LIS professionals had not observed library staff participation in the process of selection and acquisition in the last five years of their service. They showed their complete dissatisfaction regarding library staff participation in the process of acquisition. Ameen and Hiader (2007c) and Ameen (2005) also found that acquisition staffs in the university libraries of Pakistan do not have the needed authority to select; acquire and purchase reading materials from the local or international market.

Apart from it, other problems which have a direct bearing on the acquisition of library materials in the university libraries include lack of funds which hit the acquisition of 62% university libraries in the province. Similarly, insufficient number of reputed book sellers in the country followed by delay in the supply of foreign books mentioned by 11(42.3%) and 10(38.4%) libraries respectively which are seriously affecting the acquisition of university libraries of KPK. Poor number of local publications to meet educational needs and high costs of imported materials were reported by each 35% libraries. Undersupplied foreign current academic and research stocks in the local market, problems of exchange rates and attempts by booksellers to supply old books at new prices, lack of trust toward LIS professionals and lack of delegation of authority for making acquisition decisions followed by lack of books in indigenous languages were the issues encountered by each 6(23%) libraries.

Haider (2003) while studying the constraints hampering the growth and development of university libraries in Pakistan also observed that inadequate finances, dearth of resources and absence of bibliographic and physical accessibility are the main factors affecting the acquisition of university libraries. Results of the study show that acquisitions offer the widest spectrum of problems in the university libraries of KPK. However, Ameen (2008) suggested that despite trust deficit, among LIS professionals, faculty and administration and a series of issues and challenges, practical and realistic steps should be taken by all concerned and especially by the LIS professionals to ensure the smooth flow of acquisition in the university libraries of Pakistan.

5. 3a.5 Issues and Challenges in Accepting Gifts and Donations

Gifts and donation of books can be an important part of collection development. Gifts and donations replace and add out of print titles, fill in missing volumes of serials and augment library budgets (Norris, 2003). The analyses of the data demonstrate that all university libraries of KPK receive different kinds of materials including books and non-book materials as gifts without formal written policies. However, policy is mandatory for handling gifts in the academic libraries which helps library professionals to decide about reading materials for inclusion in the library collection (Johnson, 2009). In the absence of policies for dealing with gifts and donations there is an apprehension that it will be both “a blessing and curse” for the university libraries of KPK. This also indicates that if university libraries in KPK continue this practice without formal policies then it will create duplication and space related problems.

Financial support was not received by any university library of the province under donation head from any organizations or individuals for collection development and management. This situation shows their complete dependency on the universities’ budgets

which are insufficient and irregular since 2009 onwards (Khan, 2009) and have place an impact the collection development of university libraries in KPK.

5. 3a.6 Issues and Challenges of Budgeting and Fiscal Management

The data reflect an unstable position of library budgets and fiscal management, adversely affecting the collection development and management policies and procedures of the university libraries of KPK. Absence and controlling of funding policies by university administration, insufficient budget allocation without any formula followed by its irregularity, limited role of LIS professionals in the process of budget preparation, absence of emergency plans and no agreements with the donor agencies for financial, technical and materials support have been the most influential factors affecting CM in the university libraries of KPK. Local literature depicts similar kinds of issues in the university libraries of Pakistan (Ameen, 2004, 2005; Haider, 2007b and Mahmood, Hameed and Haider, 2005 etc.). These studies recommend sufficient budget allocation based on some kind of formula for university libraries of Pakistan.

5. 3a.7 Issues and Challenges Related to Access

All public and private sector university libraries in KPK provide access to library materials in traditional ways. Out of 26, 11 libraries reported designated staff i.e. classifiers and cataloguers for the technical processing of library materials. The rest of 58% libraries were providing access facilities to their users without the support of technical staff.

Accesses to electronic resources are available to most of the public and private sector universities of the province via HEC Digital Library with some technical issues. Due to poor marketing and lack of digital literacy on the part of the users, the resources of HEC Digital Library are under-used. There is also lack of computer experts and applications for the access management of electronic resources in the university libraries of the province. Bhatti, Chohan and Asghar (2014) suggested that Pakistani LIS professionals should positively

motivate and educate university faculty members and research scholars to maximise the use of HEC Digital Library.

5. 3a.8 Issues and Challenges in Promoting Library Collection to Users

We are living in a digital era where access to information has come on the fingers tips. Though, marketing has become an important element in the academic library field to educate the users' community about the potential of library collection. However, the current study found that there was lack of marketing strategies to promote library collections and services in the university libraries of KPK. They are still dependent on the limited use of traditional methods for the promotion of collection to the users. Similarly, there is also lack of modern applications for the promotion of library collection. Similar kind of results were observed by Asghar (2012) and Asghar and Bhatti (2012) in their studies. Out of 26 universities, the use of modern techniques including the usage of institutional website, library webpage, email alerts and application of social media for the promotion of library collection and services was reported by 5 libraries explaining that 81% of the population are not using these modern techniques. However, a recently conducted study of Asghar and Bhatti (2014) found that the attitude of LIS professionals in Pakistan is positive towards the adoption of modern marketing strategies for maximum utilization of library resources. This study suggests mission statement and marketing plans for the academic libraries of Pakistan where products and services should be designed keeping in view the preferences of user communities.

5. 3a.9 Issues and Challenges in the Evaluation and Weeding of Library Materials

Evans and Saponaro (2005) has presented a good account of psychological and administrative problems of weeding in the academic institutions. Despite much justification for weeding among the professional circles, it does not appeal the community of university libraries in Pakistan (Ameen, 2005). The current study portrays that the culture of evaluation

of collection seem to have less developed in the university libraries of KPK. Evans (2012, 2005, and 2004) noted that LIS professionals do not tend to weed because it is hard and risky. The analyses of data show that, though university libraries in KPK apply a variety of formal and informal methods to evaluate, assess and get feedbacks on the collection irregularly and on a limited scale but still the culture of formal collection evaluation have not developed. Universities with large collection sizes and space related problems adopted such type of strategies and that too, under compulsion to create space for the new items. Few universities reported the presence of weeding rule in their libraries. During qualitative data analyses it was noted that in majority of the cases weeding in the university libraries is hindered because of administrative issues with the university administration and faculty resistance. Similarly, absence of weeding rules, lack of human resources, financial constraints and opposition from faculty make LIS professionals handicap to weed materials in the university libraries of KPK. Evan and Saponaro (2004, 2005) and Johnson (2009) also observed that in order to prevent controversies from faculty and administration, LIS professionals are conservative in their weeding or de-selection process. This also means that the bigger the better policy prevails in the university libraries of KPK where a university is evaluated on the quantity of its collection and not on its quality. However, Gregory (2011) states that most LIS professionals are book lovers at heart and therefore keen to selection, developing and maintaining a quality collection. But at the same time he states that just as no garden can prosper if left un-weeded, so will a library collection inevitably fall into disrepair, if not outright ruin, if methodical and careful approaches to de-selection are not undertaken.

5. 3a.10 Issues and Challenges Related to Cooperative Collection Development, Inter Library Loan and Resource Sharing

The study demonstrates that there are some technical and procedural coupled with psychological issues among LIS professionals which hinder them to enter into formal cooperative collection development, inter library loan and resource sharing programs. This is the reason that there is a complete absence of cooperative collection development; inter library loan and resources sharing programs among the university libraries of KPK with in and across public and private sectors. All universities are working in isolation in their own domains. Though, due to electronic resources and ICT facilities it is now possible to enter into cooperative activities, but so far no initiatives has been taken by the LIS professionals with the exception of few where university publications and research journals are exchanged on reciprocal basis through personal contacts. Ameen (2008b) suggested that these issues can be resolved with the help of motivating and facilitating LIS professionals, and creating awareness among them about the importance of the issue, developing web OPAC and formulating standards and protocols at local and national level with the help of PLA.

5. 3a.11 Issues and Challenges of Preservation and Conservation of Library Materials

The analysis of data show limited and traditional preservation and conservation strategies adopted according to the local environment for library collection and building. Out of 26, only two libraries had microfilming facilities and that too were adopted for their rare collection/manuscripts. Digitization of library materials which is a latest phenomenon was adopted by none of the university library in KPK. According to Rafiq and Ameen (2012) digitization of library materials needs more funds; human resources, expertise and sophisticated instruments, and university libraries in Pakistan lack such type of facilities. Therefore, the phenomenon of digitization in the university libraries of Pakistan is in its infancy.

5. 3a.12 Issues and Challenges of ICT, Electronic Resources and HEC Digital Library

The advent of ICT, access electronic and digital resources via HEC Digital Library has brought a revolution in the academic institutions of Pakistan. The analyses of responses of LIS professionals show high favour for the applications of ICT, electronic resources and access to HEC Digital Library. It was noted that ICT, electronic resources and HEC Digital Library have placed a tremendous impact on the CM policies and procedures of university libraries in KPK. The study found low usage of HEC Digital Library resources due to lack of marketing strategies and its usage in the central and departmental/seminar libraries and on campus level. Khan (2013) and Khan and Ahmed (2013) suggested that these issues can be resolved by carefully adopting marketing strategies to promote the sources of HEC Digital Library in the universities of Pakistan.

There are several issues and challenges related to ICT, electronic resources and HEC Digital Library. Some of the most common problems are electricity failure/fluctuation/load shedding, lack of access to frequently used e-journals and e-books and archival materials, lack of training and need of more orientation, lack of online searching skills of users and low speed of internet. Apart from it lack of computer hardware, software facilities and their proper maintenance are also sever. Library and information professionals also complained that selection of HEC Digital resources is made independently through a centralized system without involving library professionals. Similarly, they also mentioned that financial flow comes with tough policies; which adversely affect library's online access to electronic resources. Warraich and Ameen (2008) suggested that extensive training session for LIS professionals and users' community with focus on IT orientations can solve these issues in the university libraries of Pakistan. Similarly, they also proposed that universities in Pakistan should have back up system in case of power failure to ensure the uninterrupted flow of electricity and internet connectivity in their campuses.

Research Question 5: What is the Level of Users' Satisfaction with CM Policies and Procedures Adhere to by the University Libraries of KPK?

Academic libraries within the universities maintain huge collections of information resources and managing them according to the satisfaction of the users is the most important task of LIS professionals (Rupak and Shalini, 2012). This study examined the level of users' satisfaction with the policies and procedures of CM in fulfilling their information needs. It was noted that their level of satisfaction was between satisfaction and dissatisfaction. However, it was more lopsided towards the latter. This means that users are dissatisfied with the policies and procedures of CM in the university libraries of KPK in fulfilling their information needs effectively. The analyses of qualitative and quantitative data show that the reason behind their dissatisfaction is lack of proper interest by library management, insufficient efforts by LIS professionals towards realising their active role for the formulation of written CDPs, absence of proper library committees, lack of coordination from the faculty, administrative problems with the authorities and lack of resources. These issues hamper effective collection development and resultantly create problems for the user community. Sivathaasan (2013) noted that users' satisfaction is influenced by the collections of library materials. This means that if collections of library are up to the mark then the users will be automatically satisfied.

Review of library literature depicts that users' needs are assessed in terms of the availability of materials they seek in libraries. But, the availability of materials does not mean accessibility and use (Popoola, 2001). Therefore, effective CM policies and procedures should be adopted by the university libraries of KPK to satisfy users' needs in terms of availability, accessibility and use materials.

5.3 Conclusions

5.3.1 Type of Library System

1. Centralized library system is the most common and preferred, adopted by most of the public and private sector universities of KPK. The system of central libraries with departmental and seminar libraries is linked with the public sector universities only.

5.3.2 Collection Development

1. Collection in the university libraries of KPK is mostly developed in the subject areas of Social Science, Management & Information Sciences, Islamic & Oriental Sciences, and Arts & Humanities. While in collection building in the subject areas of pure, applied and life sciences it is comparatively low.
2. Most of the universities have developed their book collection more effectively as compared to other type of materials.
3. Manuscripts were part of the collection of two public sector universities in the province.
4. Collection development in respect of A/V materials and CD ROM databases is limited and small.
5. Access to the collection of HEC Digital Library is available to 22 universities of KPK. Four universities in KPK do not have access to this facility.

5.3.3 Users' Community

1. Undergraduates' students constitute major portion of users' community followed by postgraduate, and researchers in the universities of KPK.
2. The strength of academics/teaching faculty is higher in the public than private sector universities.

3. Most of the public and private sector universities, allow their administrative staff to have access to the library holdings.
4. The policies of providing access to the external users are very strict. Only two universities from both the sectors, provide access to external users in KPK.

5.3.4 Responsibility of Collection Development

1. The responsibility of collection development and management in the university libraries is a shared responsibility of LIS professionals in their various cadres i.e. Assistant Librarians, Deputy Librarians and Chief Librarians.
2. The concept of collection development LIS professionals exclusively responsible for collection development has not yet developed in its true sense in the university libraries of KPK. Only two public sector universities have appointed collection development staff in their libraries for collection development and management.
3. In most of the university libraries junior staff members have been delegated the power to take charge of collection development.

5.3.5 Assessing Users' Needs

1. University libraries in KPK apply a variety of formal and informal methods to assess users' needs. However, these projects are carried out irregularly and on a limited scale and therefore, needs more developments in it for effective collection building.
2. Discussions with the faculty members is used major technique to find out users' needs which results building a large portion of collection on the recommendations of faculty.
3. Assessing users' needs are influenced by lack of budget, lack of cooperation from faculty members, students, administration and resources.

5.3.6 Collection Development Policies (CDPs)

1. There are no formal CDPs in the university libraries of KPK. Most of the university libraries have some type of documents containing traditional procedures for selection, acquisition, weeding rule and information about other library activities.
2. Library and information science professionals are serious about the formulation of CDPs; however, lack of cooperation from the faculty, administrative procedural issues with the authorities and lack of resources in the libraries are the main factors affecting the formulation of written CDPs.

5.3.7 Selection

1. There are centralized selection procedures in the public and private sector universities of KPK with faculty's influence on the overall processes of selection of materials.
2. Most of the universities do not have selection teams for the selection of library materials affecting the overall collection development and management in libraries.
3. The role of senior LIS professionals in the process of selection of library materials is lagging behind.
4. Library and information science professionals roles are more of facilitators and not of decision makers" in the process of selection.
5. There is a lack of coordination among LIS professionals, faculty members and university administration in the process of selection.
6. Budget cuts on the university and its impact on the libraries, inclusion of foreign books and the unavailability of up-to-date lists in the local market create problems in the process of selection.

7. Information and communication technologies and the infiltration of electronic resources have created copyright, authenticity of materials and access versus ownership like issues in the university libraries of KPK.
8. Both physical and electronic materials are evaluated before selection.
9. Traditional selection aids i.e. publishers' catalogues; trade bibliographies; vendors' lists; book fairs and reviews from newspaper and magazines etc. are most commonly used for selecting library materials.

5.3.8 Acquisition of Materials

1. Most of the university libraries are functioning without acquisition departments and acquisition policies. Only few old universities with big collection size have acquisition departments and policies in their libraries.
2. Most of the library collection both local and foreign is acquired from local booksellers and book supplying agents through purchase.
3. The trend of acquiring foreign materials directly from abroad is very low.
4. Faculty and administration have a dominant role in the process of acquisition.
5. The exchange program is limited to journals, magazines and university publication on reciprocal basis through personal contacts.
6. Budget cuts on the universities have seriously placed an impact on the acquisition of both local and foreign materials.
7. Insufficient number of reputed book sellers in the country, delayed supply of foreign books, poor number of local publications to meet educational needs, high costs of imported materials, undersupplied foreign current academic and research stocks in the

local market, problems of exchange rates and attempts by booksellers to supply old books at new prices, lack of trust toward LIS professionals and lack of delegation of authority for making acquisition decisions are the main factors affecting the acquisition policies and procedures of university libraries of KPK.

8. Books are the major form of gifts received in the university libraries of KPK than any other form.

5.3.9 Budgeting and Fiscal Management

1. There is lack of funding policies for university libraries in KPK.
2. Insufficient budget allocation followed by its irregularity on annual basis is placing a severe impact on the collection development and management activities of the university libraries.
3. The role of LIS professionals in the process of library budget preparation is very limited. Most of the library related financial matters are dealt by the treasury wings of the universities.
4. University libraries in KPK have no emergency plans or agreements with the donor agencies for financial, technical and materials support.
5. Collection development has been the most targeted area of budget cuts.
6. The financial position of university libraries in KPK is very poor and unsatisfactory.
7. Library and information science professionals are unaware of their exact library budgets because of their nonparticipation in the budgetary procedures.
8. Library securities are collected but it has a little role in the collection development and other management activities of libraries.

9. Most of the material budget is spent on the purchase of books and journals.
10. No amount has been received under donation by any university of the province.

5.3.10 Access to Library Holdings

1. All public and private sector university libraries in KPK provide access to library materials in traditional ways.
2. Libraries with big collection size have appointed technical staff i.e. classifiers and cataloguers for the technical processing of library materials.
3. Accesses to electronic and digital resources are available on campus via HEC Digital Library through universities specified Internet Protocol (IP) addresses.
4. There is also lack of computer and IT experts to handle and manage online access to electronic and digital resources.
5. HEC Digital Library has supplemented the print resources of the university libraries.
6. Most of the university libraries in KPK provide onsite access to their library holdings where users can physically consult and issue reading materials. Parallel to onsite access, few university libraries also provide online access to their library holdings.
7. Information about university libraries and HEC Digital Libraries is usually available on institutional websites.
8. There is lack of independent library websites in the university libraries of KPK.

5.3.11 Promoting Library Collection to the Users

1. There is lack of marketing strategies to promote library collection and services in the University libraries of KPK.

2. Most of the universities are still dependent on the limited use of traditional methods to promote collection to the users. Orientation programs are most commonly arranged in the libraries to promote collection and services to the users.
4. The application of modern techniques to promote library collection is very low.

5.3.12 Evaluation and Weeding of Library Materials

1. Though, university libraries in KPK apply a variety of formal and informal methods to evaluate, assess and get feedback on the collection in a limited range, however, the culture of formal collection assessment and evaluation is less developed.
2. There is lack of weeding rule and policies hindering the process of weeding.
3. In the absence of weeding most of the university libraries are facing space related issues in the libraries.
4. Library and information science professionals avoid weeding to prevent controversies from administration and teaching faculty.

5.3.13 Cooperative Collection Development, Inter Library Loan and Resource Sharing

1. There is a complete absence of cooperative collection development, inter library loan and resources sharing programs among the university libraries of KPK, across and within public and privates sectors. All university libraries are working in isolation restricted to their own domains only.
2. Facilities exist to establish cooperation among the university libraries but due to lack of encouragement, technical issues and attitude problems, LIS professionals are not engaged in cooperative activities.

5.3.14 Preservation and Conservation of Library Materials

1. Limited and traditional preservation and conservation strategies are adopted by university libraries of KPK for collections. However, libraries with manuscripts collection like University of Peshawar and Islamia College University libraries were more concerned regarding preservation and conservation of their collections.
2. There is a lack of adopting modern preservation and conservation strategies for collection.

5.3.15 ICT, Electronic Resources and HEC Digital Library

1. There is a high favour for the applications of ICT, electronic resources and HEC Digital Library in the university libraries of KPK.
2. Information and communication technologies, electronic resources and HEC Digital Library have placed a tremendous impact on the CM policies and procedures of university libraries in KPK by providing access to quality e-resources which has supplemented their print resources.
3. Information and communication technologies, electronic resources and HEC Digital Library have provided an opportunity to the university libraries to give easy access to the users and frame an OPAC.
4. Information and communication technologies, electronic resources and HEC Digital Library have resolved library management problems up to a greater extent in the universities of KPK.
5. As compared to other electronic and digital resources, the impact of HEC Digital Library on the CM of university libraries is highly prominent in the university libraries of the province. Because HEC Digital Library has specifically;

1. improved the use of electronic resources
 2. resolved the issues of selection and acquisition of library materials
 3. stimulated research despite financial constraints
 4. brought the library on the fingers tips of the users which is not possible in a traditional way
 5. ensured preservation and conservation of library materials
 6. supplemented print resources
 7. serves multidiscipline at one place and time
 8. provides spontaneous access to high quality, reliable up to data information to the users of all disciplines
 9. reduced library staff burdens
 10. solved space problems in libraries
 11. ensured the establishment of Resources sharing and collaborative programs
 12. provided solution of Intellectual Property Rights (IPR) and related issues
6. There are several factors which are leaving an adverse on the effective function of ICT application, electronic resources and HEC Digital Library in the university libraries of KPK. These factors include electricity failure/fluctuation/load shedding, lack of access to frequently used e-journals and e-books and archival materials, lack of training and need of more orientation, lack of online searching skills of users and library professionals, low speed of internet, lack of computer hardware and software facilities and their proper maintenance.

5.3.16 Users' Satisfaction

1. The level of users' satisfaction with various CM activities including needs assessment, collection development procedures, organization and promotion of library materials, ICT facilities in libraries and access to HEC Digital Library is not encouraging.

5.4 Recommendations

The following recommendations are required to be followed to improve the CM of university libraries in KPK:

1. University libraries in KPK should formulate formal CDP. The goals and objectives of collection development should be clearly mentioned in the policies and procedures of CM.
2. The mission of university libraries for the achievement of desired objectives of parent institution must be part of planning for collection development.
3. Collection development policies should be developed in consultation with faculty and administration. Pakistan Library Association should take solid initiatives to formulate standard CDPs for libraries in the institutions of higher learning in Pakistan.
4. The issues of who shall select library materials should be resolved. This study suggests that selection of library materials should be a joint responsibility of qualified LIS professionals working in close cooperation and consultation with faculty and administration.
5. To turn out skilled and knowledgeable professionals, library schools in the country need to review LIS curriculum and include practicum and internship programs. This would help to train future LIS professionals to cope up with the new challenges of digital environment. Library associations should also collaborate to design LIS curriculum according to the changing environment and trends.
6. Library schools and professional association and groups should arrange refreshers courses, seminars, workshops and continuing education system for library professionals in Pakistan to train them and update their knowledge to face the challenges of the information and digital era.

7. Because of the recent developments every effort should be made to assess users' needs on regular basis to ensure that library collections meet their required needs effectively.
8. In order to fill gaps in library collections, university libraries should participate in cooperative collection development. All university libraries of KPK should come under the auspices of HEC to formulate a consortium. There should also be agreements among all university libraries to disseminate and distribute information resources in the most possible quickest way. The study also recommends inter library loan facility, documents delivery and resources sharing on commercial scale. This would save and generate sufficient funds for university libraries in the province.
9. In addition to books, relevant journals should be provided to meet the information needs of users. However, each university library should set objectives stipulating the percentage of journals in their collection.
10. It is essential that collection should be easily available and well organized to assist users in their search for information. Digital and electronic collection should be given enough proportionate so that users could access them remotely.
11. The study recommends the participation of LIS professionals in institutional boards meetings to find out about new academic developments and to develop libraries' collection in line with the new developments.
12. The university administrations in KPK should specify certain percentage of budget for the library on annual basis for collection development and purchase of equipment with which to access the resources.
13. The government should take up the responsibility to provide sufficient funds to enable universities to provide the required support to their libraries to extend their collection and facilities according to their plans. Proposal in this regard should also

be prepared by LIS professionals and the matter of budget cuts should be taken up with the high ups of the university as a matter of urgency. Library and information science professionals of universities should also stand together on this issue to plead their cases.

14. Feedback of users and evaluation of library collection play an important role in the development of collections. Findings demonstrated that there is no well-established system of getting users' feedback and evaluation of library collection. Feedback of users and evaluation of collection is obtained through formal and informal means but the results are not evaluated properly. In the absence of subject LIS professionals, it would be of value to hire the services of outside experts to evaluate the collection of university libraries of KPK to get neutral results and formulate collection development goals in the light of these results. Moreover, feedback of users regarding library collection and services should be obtained manually or online through institutional/library websites from users on regular basis.
15. All LIS professional must also look at the new programs offered in the universities and make provision for developing collection in the new fields, as and when required.
16. Electronic books and e-journals should be added to the collection. Networked access should be provided to electronic resources in the central libraries of all the universities.
17. Good relationships should be established with reputed publishers and bookseller agents at national and international level for the purpose to get information about new and important publications for collection building.
18. The study recommends LIS professionals and faculty collaboration for effective CM in the university libraries of KPK.

19. Research Based Ranking System of universities by the HEC has brought an opportunity for the LIS professionals to work hard in the promotion and up left of research activities through the provision of effective and needs based library facilities to the faculty and research scholars to prove themselves and change the perceptions of faculty and administration towards them.
20. Universities must have sound funding policies for their libraries to support them financially. This would help the universities to achieve their academic and research goals and ultimately to get their ranking improved.
21. Library and information science professionals should also think over alternative funding strategies for their libraries. This includes initiation of affordable fee based services i.e. book banks schemes, library securities, library registration fees, photocopying and scanning facilities etc. and more importantly the establishment of contacts with donor agencies for financial and materials support .
22. The HEC provides grants and financial assistant for library development to the institution of higher learning. All LIS professionals should prepare feasible and convincing plans in this regard for their libraries and submit it to the HEC.
23. The utilization of allocated library budget at the end of fiscal year which causes substandard and unwanted acquisition should be discouraged. All LIS professionals must have sound policy for library budget utilization for standard and effective collection development and management.
24. ALL LIS professional should develop good communication skills, knowledge of ICT, vibrant to convince faculty and administration and leadership qualities to lead the profession. Senior LIS professionals should play their part in the process of selection and acquisition of library materials. However, their roles should be acknowledged by faculty and administration. University administration should trust

- LIS professionals in their library related management which would encourage them to play their part actively in the achievement of academic goals of the universities.
25. Weeding of library materials should take place after a specific period of time. The time for weeding should be fixed according to the nature of collection by the LIS professionals in consultation with universities administration and teaching faculty.
 26. Proper preservation and conservation strategies should be adopted for collection and library buildings. Digitization should be initiated which would facilitate material preservation and onsite and remote access. Though, preservation of digital and electronic resources is quite challenging due to computer hardware and software problems. However, proper physical care, uninterrupted power supply and installation of up-to-date computer virus software can ensure preservation of electronic and digital resources to a greater extent.
 27. Information and communication technological facilities should be provided in all the public and private sector university libraries of KPK. All universities should be provided access to HEC Digital Library. Most of the library users are not computer literate, university libraries having access to HEC Digital Library should arrange ICT based literacy programs for the users to promote its use on a wider scale.
 28. Sufficient number of terminals should be provided in both central and departmental/seminar libraries. Moreover, HEC Digital library's access should be extended to offices and students and faculty hostels.
 29. Apart from the resources of HEC Digital Library, important databases related to specific disciplines and subjects should be subscribed for academics and researchers. Since, most of the online databases, electronic and digital resources are costly therefore, their financial sustainability and cost factor should be evaluated properly before subscription.

30. The HEC should play its part to get the electronic lists of library holdings of all the university libraries and prepare a union catalogue. This catalogue can also take the shape of an OPAC to assist users in their search for required information resources. This will enhance resource sharing programs among the university libraries of KPK. Moreover, in the absence of inter library loan this facility will help to be used as a referral service to guide users to locate their required information.
31. With the emergence of ICT, electronic and digital resources, the formats of information sources, services and mode of delivery have changed significantly. This situation has increased users' expectations, demanding LIS professionals to develop their competencies to face these challenges.
32. Marketing provides opportunity to inform potential users about library collection and services. University libraries should adopt traditional (university publications, annual reports, events etc.) and modern (social media, email alerts, university websites, library websites etc.) techniques to market collection and services to the users.

5.5 Areas for Further Research

The current study has opened new areas of research in the field of collection development and management. The following are some suggestions in this respect:

1. A detailed study on the impact of HEC Digital Library on the collection development and management of university libraries in Pakistan should be conducted.
2. The current study should be replicated after five years to study the impact of ICT on the CM activities in the libraries of the academic institutes of higher learning in Pakistan.
3. Comprehensive studies on the policies and procedures of CM in the university libraries of other provinces should be conducted.
4. Comprehensive and comparative case studies on the current status of CM of public and private sector university libraries should be conducted at provincial and national level.
5. The level of users' satisfaction with the policies and procedures of CM in the university libraries of Pakistan.
6. Challenges and possibilities for CM in the digital environment: a Pakistani scenario
7. Collection evaluation: a foundation for collection development and management in the academic libraries
8. Needed competencies for CM in the university libraries of Pakistan

Appendix A
COVERING LETTER FOR QUESTIONNAIRE SURVEY
(LIS Professionals)



Dearest and Respected Sir/Madam
Assalam-o-Alaikum

In partial fulfilment of the requirements for my doctoral study in Library and Information Science at the Islamia University of Bahawalpur, I am conducting a study on ***“Collection Management in the University Libraries: Policies, Procedures and Users’ Satisfaction”***. The need of this study arose from many factors i.e. shrinking budgets, rising costs and high demand of reading materials, high rate of printing of books and journals at international and low production of the same at national level, development of technologies, paradigm shift to digital and electronic resources, high need for resource sharing, research based ranking system of universities, the establishment of new universities and low production of scholarly publications on the subject motivated this work.

This research work would have multi-pronged advantages and benefits for the stakeholders of higher education sector in the province of Khyber Pakhtunkhwa in specific and Pakistan in general. This would be of great importance to the university administration (Vice Chancellors, Registrars, and Treasurers) and professional librarians who will largely benefit from the findings of this study to plan effective collection management strategies in their university libraries. It will investigate the existing collection management strategies and would suggest possible measures for improvement.

In the changing academic environment where new universities and institutions of higher education have been established and more are expected to be established in the near future in Khyber Pakhtunkhwa, this study will help as a guide for planning better policies and procedure for collection management in these institutions. This change also presupposes that there should be an infrastructure in place to enable academics and researchers to obtain the information they need.

This study requires the collection of data by various methods including questionnaires. Being a LIS professional of an eminent institution you have been selected to participate in this survey.

You are therefore requested to spare some moments out of your precious time and fill in the attached questionnaire at your earliest possible convenience and send it in the return envelope. I am also well aware of your professional engagements and other academic and personal assignments, but your cooperation is imperative to the successful completion of my study.

Yours Sincerely,

Ghalib Khan

PhD Student

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Appendix B**QUESTIONNAIRE FOR LIS PROFESSIONALS**

**COLLECTION MANAGEMENT IN THE UNIVERSITY LIBRARIES: POLICIES,
PROCEDURE AND USERS' SATISFACTION
QUESTIONNAIRE**

Section 1: Personal, Institutional and Library related Information

1. Demographic Profile

- a. Name of the Library: _____
- b. Address: _____
- c. Phone: _____ Fax: _____ Web Site: _____
- d. Email: _____ Year of establishment: _____
- e. Name of Parent Institution: _____
- f. Type of University: i. Public Sector ☐ ii. Private Sector ☐


2. What type of library system is in your university?

- a. Centralized (Central library) ☐
- b. Decentralized (Departmental libraries). ☐
- c. Central library with departmental/seminar libraries ☐

3. How many disciplines are covered in your university? (Select as many as applicable)

- a. Arts and Humanities ☐
- b. Islamic and Oriental Studies ☐
- c. Numerical and Physical Sciences ☐
- d. Life and Environmental Sciences ☐
- e. Management and Information Sciences ☐
- f. Social Sciences ☐
- g. Medical Sciences ☐
- h. Engineering Sciences ☐
- i. Agricultural Sciences ☐
- j. Other _____

4. Users' community (Select as many as applicable)

S.No	Users; Community	Number of Users'				
		500 to 1000	1001 to 1500	1501 to 2000	2001 & above	
1.	Undergraduate students					
2.	Postgraduate students					
3.	Researchers					
4.	Academics					
5.	Administrative staff					
6.	External users' (if any)					

Note: Please mention the number of users in the last column if the figure is not listed in the table

6. Information about collection

I. Printed Materials (please tick the relevant figure)

Resources	Collection in Figures					
	5000 to 10,000	10,001 to 15,000	15,001 to 20,000	20,000 to 25,000	25,000 & above	↓
Books	5000 to 10,000	10,001 to 15,000	15,001 to 20,000	20,000 to 25,000	25,000 & above	
Journals	1000 to 2000	2001 to 3000	3001 to 4000	4001 to 5000	5001 & above	
Magazines	1000 to 2000	2001 to 3000	3001 to 4000	4001 to 5000	5001 & above	
Newspapers	1000 to 2000	2001 to 3000	3001 to 4000	4001 to 5000	5001 & above	
Other						

Note: Please mention the number of collections in the last column if the figure is not listed in the table

II. Non-Printed Materials (please tick the relevant figure)

Resources	Collection in Figures					
	500-1000	1001-1500	1501-2000	2001-2500	2500 & above	↓
A/V Materials						
CD RAM databases						
Online Databases						
Manuscripts						
Other						

Note: Please mention the number of collections in the last column if the figure is not listed in the table

III. Staff of the library

S.No	Library Staff	No of Library Staff
1.	Professional	
2.	Para professional	
3.	Non professional	
4.	IT professionals	
5.	Other	

8. Who is responsible for Collection Management in your university? (Select as many as applicable)

- a. Chief Librarian ☐
- b. Collection Development Librarian ☐
- c. Deputy Librarian ☐



d. Assistant Librarian

e. Other _____

Section 2: Assessing Users' Needs

1. What method do you employ for assessing users' needs? (Select as many as applicable)

- a. Conduct surveys ☐
- b. Consult syllabus ☐
- c. Study of faculty and research scholars' field of specializations ☐
- d. Study of ongoing research projects ☐
- e. Circulation statistics ☐
- f. Interlibrary loan requests ☐
- g. Discussions with the HoDs/Chairpersons ☐
- h. Discussions with students' representatives ☐
- i. Other _____

2. For what purpose users' needs are assessed? (Select as many as applicable)

- a. For collection development and management ☐
- b. For improving different library services ☐
- c. For library building arrangements ☐
- d. For library administrative purposes ☐
- e. Other _____

Section 3: Collection Development Policy

1. Does your library have a formal written policy for Collection Development and Management?

- a. Yes ☐
- b. No ☐

2. What are the goals of collection development and management policies and procedures of your university library? (Select as many as applicable)

- a. To support the institution's mission and objectives ☐
- b. To promote research among regional, national, and international researchers ☐
- c. To promote the educational role of the institution ☐
- d. To make material accessible ☐
- e. To preserve the material for users now and in the future ☐
- f. To provide material by ensuring its availability to users ☐
- g. To rationally develop collections in response to new research needs ☐
- h. To make the best use of existing financial resources ☐
- i. To make informed decisions in terms of format choices ☐
- j. To develop and maintain a balanced collection management program in light of increasing electronic resources ☐
- k. To maximize the availability of special resources by entering and maintaining collaborative programs ☐
- l. Any other _____

Section 4: Selection of Library Materials

1. How selection of materials is made in you university library? (Select as applicable)
- a. Through university's Purchase Committees ☐
 - b. Through university's Library Committees ☐
 - c. Independent purchase by the central library according to the allocated budget ☐
 - d. Departments select materials according to their needs and submit lists to the central library ☐
 - e. Any other _____

2. Do you have designated staffs who participate in the process of selection of materials?
- c. Yes ☐
 - b. No ☐

If "No" who mainly participates in the process of selection?

- a. Chief Librarian ☐
- b. Deputy Chief Librarian ☐
- c. Assistant Librarian (nominated and delegated the power to participate) ☐
- d. Other _____

3. In which languages are materials selected in your library? (Select as many as applicable)

a. English ☐ b. Urdu ☐ c. Arabic ☐ d. Pashto ☐ e. Hindko ☐ f. Persian ☐

4. What is the proportionate of language wise selection of materials?

S.No	Language	10 to 20 %	21 to 30 %	31 to 40 %	41 to 50 %	51 %& above
9.	English					
10.	Urdu					
11.	Arabic					
12.	Pashto					
13.	Hindko					
14.	Sindhi					
15.	Persion					
16.	Other					

5. In what format do you select materials? (Select all if applicable)

Paper Format		Electronic Format		
Books	Serials	Books	Serials	Databases

6. Do you have a selection team for selecting electronic resources?

a. Yes ☐ b. No ☐

If "Yes" does it include technical apart from subject experts to check the compatibility of selected resources in the prevailing environment of your library?

a. Yes ☐ b. No ☐

If "No" do you hire the services of technical experts when selecting e-resources?

a. Yes ☐ b. No ☐

7. How do you evaluate an electronic resource? (Select as many as applicable)

S.No	Evaluation Criteria	Yes	No
8.	Is the resource authoritative/Authentic?		
9.	Is the resource licensed and copyright protected?		
10	Does the technology make the contents of the e-resources accessible in a manner that better serves users' needs than does an existing equivalent print resource that library already have?		
11	Does the electronic resource fill current gaps in the print collection?		
12	Does the electronic resource duplicate information or materials that are already owned by the library?		
13	Does the library replace a current print resource with an electronic one and what are the price ramifications of doing so?		
14	Charges Price		

15. What tools are used for selecting library materials? (Select as many as applicable)

- a. Vendors lists ☐
- b. Bibliographies ☐
- c. Publishers catalogues ☐
- d. Reviews from newspaper and magazines etc. ☐
- e. Book fairs and bookshops ☐
- f. Online sites for identifying titles (Amazon, Bookfinder etc.) ☐
- g. In house information such as inter library loan requests ☐
- h. Suggestions from the faculty members/teaching staff ☐
- i. Suggestions from the students/research scholars ☐
- j. Through email alerts from online databases
(Science Direct, Sage Publication, Questa, emerald, etc.) ☐
- k. Other _____

Section 5: Acquisition of Library Materials

1. What kinds of methods are used for acquiring materials? (Select as many as applicable)

- a. Purchases ☐ b. Gifts ☐ c. Legal deposits ☐ d. Exchanges of Materials ☐
- e. Donations ☐ f. other _____


2. How do you acquire local materials? (Select as many as applicable)

- a. From Vendors ☐
- b. From Publishers ☐
- c. From Booksellers ☐
- d. Orders are placed through book supplying agencies ☐
- e. Personal visits are made to market ☐
- f. Through book fairs ☐
- g. Other _____

3. How do you acquire foreign materials?
- Directly from the foreign agency ☐
 - From Vendors ☐
 - From Publishers ☐
 - From Booksellers ☐
 - Orders are placed through book supplying agencies ☐
 - Others _____
4. Who takes the final decision for the acquisition of selected library materials?
- Library staff ☐
 - Academic/Teaching staff ☐
 - Library Committee comprising library staff and academic staff ☐
 - Other _____
5. What major hindrances/problems are faced in acquiring library materials? (Select as many as applicable)
- Insufficient number of reputed book sellers in the country ☐
 - Undersupplied foreign current academic and research stocks in the market. ☐
 - Poor number of local publications to meet educational needs. ☐
 - The acquisition of government publications and research reports is very difficult. ☐
 - Lack of funds ☐
 - Problem of exchange rate ☐
 - Economic recession ☐
 - Insufficient budgets for university libraries ☐
 - Attempts by booksellers to supply old books at new prices. ☐
 - Local vendors are very good and cooperative people. ☐
 - Delayed supply of foreign books. ☐
 - Lack of trust toward librarians and lack of delegation of authority for making acquisition decisions ☐
 - Lack of books in indigenous languages ☐
 - Exorbitant costs of imported materials ☐

Section 6: Gifts and Donations


1. How many gifts do you receive per annum in respect of the following? (Select as many as applicable)

S.No	Type of Materials	Volumes of Materials				
		25 to 50	51 to 100	101 to 150	151 & above	
13	General Books					
14	Text Books					
15	Research Articles					
16	Theses and dissertations					
17	Research Reports					
18	Serials					
19	Conference proceedings					
20	Dictionaries					
21	Encyclopedias					
22	News papers					

23	Magazines					
24	Government Publications					

Note: Please mention the number of collections in the last column if the figure is not listed in the table

2. How many donations do you receive per annum in respect of the following? (Select as many as applicable)

S.No	Type of Materials	Volumes of Materials				
		250 to 500	501 to 1000	1001 to 1500	1501 & above	
1.	General Books					
2.	Text Books					
3.	Manuscripts					
4.	Research Articles					
5.	Theses and dissertations					
6.	Research Reports					
7.	Serials					
8.	Conference proceedings					
9.	Dictionaries					
10.	Encyclopedias					
11.	News papers					
12.	Magazines					
13.	Government Publications					

Note: Please mention the number of collections in the last column if the figure is not listed in the table

Section 7: Budgeting and Fiscal Management

1. What is your institution's total annual budget allocation for library collection in Rs?

- a. 200,000 to 400,000 ☐ b. 400,000 to 600,000 ☐ c. 600,000 to 800,000 ☐
d. 800,000 to 100,000 ☐ f. 100,000 to 150,000 ☐ g. 150,000 & above ☐

2. Do you get your budget regularly?

- a. Yes ☐ b. No ☐

3. What is the allocation of budget in respect of the following?

S.No	Titles	10 to 20 %	21 to 30 %	31 to 40 %	41 to 50 %	51 % & above
6.	Books					
7.	Journals					
8.	E-books					
9.	E-journals					
10.	Databases					
11.	A/V materials					
12.	Other					

4. Does your library get an increase in the budget allocation on annual basis to cope up with the rising cost of materials and other issues?

- a. Yes ☐ b. No ☐

If “No” do you voice your concern to the higher authorities?

- a. Yes ☐ b. No ☐

5. How much increase do you need in the existing library budget?

- a. 10 to 20% ☐ b. 21 to 30% ☐ c. 31 to 40 % ☐ d. 41 to 50% ☐
e. 51 % and above ☐ f. Other _____

6. Do you receive money under library securities and fines?

- a. Yes ☐ b. No ☐

If “Yes” approximately how much do you receive on annual basis from this head?

- a. 200,000 to 400,000 ☐ b. 400,000 to 600,000 ☐ c. 600,000 to 800,000 ☐
d. 800,000 to 100,000 ☐ f. 100,000 to 150,000 ☐ g. 150,000 & above ☐
h. Other _____

Section 8: Bibliographic Access and Physical Preparation

1. Do you have professional staff for classification and cataloguing?

- a. Yes ☐ b. No ☐

If “yes” please mention

- a. Number of Cataloguers _____
b. Number of Classifier _____
c. Other (if any) _____

2. Does your university library provide access to digital and electronic information resources?

- a. Yes ☐ b. No ☐

If “Yes” does it provide access to resources in respect of the following (Select as many as applicable)

S. No	Access Points	Electronic Resources					
		E-Books	E-Journals	E-Databases	Open access e-book	Open access e-journals	Internet websites
5.	On campus via internet protocol address only						
6.	Remote access (accessible from anywhere by the members)						
7.	Remote access for browsing by any one via internet (non-members)						
8.	Users can access through registered accounts						

Section 9: Promoting the Collection to the Users

1. What kind of promotion strategies do you adopt to inform the users' about library holdings? (Select as many as applicable)
 - a. Information about library materials is provided in the library through orientation programs inviting students and faculty members. ☐
 - b. List of new arrival are displayed on the main entrance of the library. ☐
 - c. List of new arrivals are sent to the respective departments for display on their notice boards. ☐
 - d. Information about library holdings is provided through tabletop displays at university events ☐
 - e. Information about library holdings is provided through posters and giveaways in the university ☐
 - f. University publications are used for marketing library sources and services i.e. students' newspapers and newsletters etc. ☐
 - g. Information about new materials are uploaded on university website ☐
 - h. Information about new materials are uploaded on library website ☐
 - i. Information is sent to all students and faculty members via email alerts. ☐
 - j. Information are shared via groups on social media i.e. face book, tweeter accounts ☐
 - etc.
 - k. Other _____

Section 10: Evaluation of the Collection

1. What methods are employed for assessing and evaluating physical library collection?
 - a. Circulation Statistics ☐
 - b. Title Count ☐
 - c. Median age of the items in the collection within the categories ☐
 - d. Shelf observation by the subject experts ☐
 - e. Holding checked against standard bibliographic lists ☐
 - f. Interlibrary loan requests ☐
 - g. Users' survey ☐
 - h. Any other _____
2. Which methods are employed for assessing electronic library collection?
 - a. Users' Surveys ☐
 - b. Network usage analysis ☐
 - c. Web pages and database hits, searches and printing record ☐
 - d. Vendors provide statistics about an electronic source usage ☐
 - e. Other _____

Section 11: Weeding

1. Do you have Written Policy for weeding out library materials?
 - a. Yes ☐
 - b. No ☐
2. What is the purpose of weeding materials in your library? (Select as many as applicable)

- a. To keep the resources up to date ☐
 - b. To stimulate circulation ☐
 - c. To save space ☐
 - d. To save time ☐
 - e. To enhance appeal ☐
 - f. To establish credibility ☐
 - g. To respond to the community needs and interests ☐
 - h. To make room for new books ☐
 - i. To make room for new technologies and formats ☐
 - j. Other _____
3. What kinds of materials are weeded out in your library? (Select as many as applicable)
- a. Factually inaccurate ☐
 - b. Old editions ☐
 - c. Book theft ☐
 - d. Damaged worn beyond mending or rebinding ☐
 - e. Replaced by a new edition ☐
 - f. Of no literary or scientific merit ☐
 - g. Irrelevant to the needs and interest of the library's community ☐
 - h. The material is easily obtainable from another library ☐
 - i. Other _____
4. How do you determine which materials are to be weeded out? (Select as many as applicable)
- a. From Circulation Statistics ☐
 - b. Studying historical data of collection ☐
 - c. Age of the items in the collection within the categories ☐
 - d. Shelf observation by the subject experts ☐
 - e. Users' survey ☐
 - f. Any other _____
5. What kinds of issues are faced in weeding out library materials? (Select as many as applicable)
- a. Administrative problem ☐
 - b. Absence of weeding rules ☐
 - c. Budget problems ☐
 - d. Staff problems ☐
 - e. Other _____

Section 12: Cooperative Collection Development and Resource Sharing

1. Are you engaged in any kind of resource sharing programs with other universities at local, national or international level?
- a. Yes ☐
 - b. No ☐

If "yes" please name some of the major programs?

2. Are you satisfied with resource sharing programs in fulfilling the information needs of users' community?

- a. Yes ☐ b. No ☐ c. To some extent ☐

Section 13: Preservation and Conservation of Collection

1. Does your library have storage facilities for reading materials?

- a. Yes ☐ b. No ☐

2. What kind of preservation strategies are adopted for library materials? (Select as many as applicable)

- a. Binding ☐ b. Microfilming ☐ c. Conservation Treatment ☐
 d. Re-housing ☐ f. Digitization ☐
 g. Any other _____

3. What type of security measures have been taken for library and library materials? (Select as many as applicable)

- a. Installation of Security Cameras in the Library ☐
 b. Installation of electronic security system ☐
 c. Installation of grills on the windows of the library ☐
 d. There is only one door for exit and entrance for staff and students ☐
 e. Have employed security guards after closing ☐
 f. Have installed security lighting at night times ☐
 g. Door buzzers and alarms are installed ☐
 h. Other _____

4. How replacement of a book/reading material is made? (Select as many as applicable)

- a. Duplicate copies ☐ b. Photo copy ☐ c. Fine ☐
 d. Other _____

Section 14 & 15: Impact of ICT and HEC Digital Library on Collection Management

Section 14: Impact of ICT on Collection Management

1. What is the impact of ICT on Collection Management? (Select as many as applicable)

- a. Helps in assessing users' needs through online surveys ☐
 b. Helps in the marking of library resources to users instantly ☐
 c. Has supplemented print resources ☐
 d. Has placed a positive impact on the budget and financial management of library ☐
 e. Helps in the selection of materials with lots of selection options at one time ☐
 f. Assists the acquisition of library materials through online orders ☐
 g. Helps in the formation of online public access union catalogue ☐
 h. Has resolved management problems in the library ☐
 i. Helps in providing bibliographic access to users in a convenient way ☐
 j. Helps the remote searching of the library collection ☐

- k. Helps in the physical preparation of library holdings ☐
- l. Has a major role in the formulation of local consortium among the libraries ☐
- m. Saves time of the readers as well as library staff ☐
- n. Has reduced the cumbersome job of library professionals ☐
- o. Helps in the preservation of library holdings ☐
- p. Helps in the evaluation of collection and weeding ☐
- q. Budget cuts have made e-resources more appealing ☐
- r. It helps in the formulation of a uniform collection management policy ☐
- s. Solved copyright and licensing problems ☐
- t. Satisfy the multidimensional information needs of users than print sources ☐
- u. Helps the library to control theft ☐
- v. Has changed library and information services globally. ☐
- w. Other _____

Section 15: Impact of HEC Digital Library on Collection Management

1. What is the impact of HEC Digital Library on the collection management? (Select as many as applicable)

- Has reduced the problems of selection
- a. Has reduced the problems of acquisition ☐
- b. Has solved financial problems of library and university ☐
- c. Provides state of the art latest information to the user community in the form of books and journals than provided by print materials ☐
- d. Serves multidiscipline at one place and time ☐
- e. It provides spontaneous information to the users of all disciplines ☐
- f. Has stimulated research activities in the university ☐
- g. Reduced library staff burdens ☐
- h. Have solved space problems in libraries ☐
- i. Resources sharing has been boosted ☐
- j. Has solved legal and licensing problems of electronic materials ☐
- Has solved problems of preservation and weeding ☐
- k. Other _____

2. What kinds of problems do you face while using HEC digital library? (Select as many as applicable)

- a. Lack of training/need more orientation ☐
- b. Lack of online searching skills ☐
- c. Have no access to archival issues ☐
- d. Low speed of internet connectivity ☐
- e. Electricity failure/fluctuation/load shedding ☐
- f. Databases are not user-friendly ☐
- g. Have not provided access to frequently used e-journals and e-books ☐
- h. Library professionals are not involved in the selection of e-resources ☐
- i. Lack of hardware facilities ☐

- j. New databases are not added on demand ☐
- k. Hardware is not frequently in functioning order ☐
- l. Hardware, software and internet connectivity is not provided to each and every department in the university (only provided to the central library) ☐
- m. Access is not provided to the students' hostels where majority of the students live ☐
Financial flow comes with stops and checks; thus adversely affecting library's online services ☐
- n. Other _____

Thank you very much for your time

Name _____

Designation _____

Signature _____

Stamp _____

Contact Numbers:

Office _____

Personal _____

Email _____

Appendix C
COVERING LETTER FOR QUESTIONNAIRE SURVEY
(For Faculty Members)



Dearest and Respected Sir/Madam

Assalam-o-Alaikum

In partial fulfilment of the requirements for my doctoral study in Library and Information Science at the Islamia University of Bahawalpur, I am conducting a study on ***“Collection Management in the University Libraries: Policies, Procedures and Users’ Satisfaction”***. The need of this study arose from many factors i.e. shrinking budgets, rising costs and high demand of reading materials, high rate of printing of books and journals at international and low production of the same at national level, development of technologies, paradigm shift to digital and electronic resources, high need for resource sharing, research based ranking system of universities, the establishment of new universities and low production of scholarly publications on the subject motivated this work.

This research work would have multi-pronged advantages and benefits for the stakeholders of higher education sector in the province of Khyber Pakhtunkhwa in specific and Pakistan in general. This would be of great importance to the university administration (Vice Chancellors, Registrars, and Treasurers) and professional librarians who will largely benefit from the findings of this study to plan effective collection management strategies in their university libraries. It will investigate the existing collection management strategies and would suggest possible measures for improvement.

In the changing academic environment where new universities and institutions of higher education have been established and more are expected to be established in the near future in Khyber Pakhtunkhwa, this study will help as a guide for planning better policies and procedure for collection management in these institutions. This change also presupposes that there should be an infrastructure in place to enable academics and researchers to obtain the information they need.

This study requires the collection of data by various methods including questionnaires. Being a faculty member of an eminent institute you have been selected to participate in this survey.

You are therefore requested to spare some moments out of your precious time and fill in the attached questionnaire at your earliest possible convenience and send it in the return envelope. I am also well aware of your professional engagements and other academic and personal assignments, but your cooperation is imperative to the successful completion of my study.

Yours Sincerely,

Ghalib Khan

PhD Student

Department of Library and Information Science, The Islamia University of Bahawalpur

03339277414

ghalibkhan1@yahoo.com

Appendix D

QUESTIONNAIRE FOR FACULTY MEMBERS

USERS' SATISFACTION WITH THE POLICIES AND PROCEDURES OF COLLECTION MANAGEMENT IN THE UNIVERSITY LIBRARIES OF KHYBER PAKHTUNKHWA

QUESTIONNAIRE

Section1: Demographic Information of the Respondents

1. Name of University _____
2. Type of University: a) Public ☐ b) Private ☐
3. Gender: a) Male ☐ b) Female ☐
4. Designation: a) Lecturer ☐ b) Assistant Professor ☐ c) Associate Professor ☐
d) Professor ☐
5. Age Group: a) 25 to 30 ☐ b) 31 to 35 ☐ c) 36 to 40 ☐ d) 41 to 45 ☐
e) 46 to 50 ☐ f) 51 and above ☐
6. Library Usage Experience: a) 3years ☐ b) 4 to 6 years ☐ d) 7 to 9 years ☐
e) 10 to 12 years ☐ f) 13 years and above ☐

Section 2: Assessing Users' Needs

1. Are you satisfied with the methods/process of users' needs assessments employed for collection development and management in your university library by the librarians?
a. Yes ☐ b). No ☐ c)To some extent ☐
2. Which methods do you prefer/recommend/suggest to the librarians for assessing users' needs for effective collection development and management in your university library? (Select as many as applicable)
 - a. Librarians should conduct surveys of the users (teaching faculty and students) for collection development and management ☐
 - b. Librarians should consult syllabus for collection development and management ☐
 - c. Librarians should study teachers and research scholars' field of specializations for effective collection development and management ☐
 - d. Librarians should held discussions with the HoDs/Chairpersons for effective collection development and management ☐
 - e. Other _____

Section 3: Collection Development

1. Do you think your university library's collection development policies and procedures are effective in meeting the academic and research requirements of the users' and achieving university's academic goals and objectives?
a. Yes ☐ b). No ☐ c)To some extent ☐
2. Are you satisfied with the collection (Books, journals, electronic resources etc.) of your university library in fulfilling your research and academic information needs?
a. Yes ☐ b). No ☐ c)To some extent ☐

3. What measures do you suggest to improve the quality and utility of the existing collection (Books, Journals etc.) of your university library? (Select as many as applicable)
- a. Library collection should be evaluated on regular basis to know about its strength and weaknesses ☐
 - b. Library professional should perform their duties more efficiently to fulfill the education and informational needs of the users ☐
 - c. Teaching community and administration should cooperate with library professionals to provide best services to the users ☐
 - d. Orientation programs should be arranged in the library and departments/constituent institutions/colleges etc. to education users about library collection and its usage ☐
 - e. Sufficient funds should be provided for collection development ☐
 - f. Collection should be properly organized, classified and catalogued ☐
 - g. Computerized catalogued library books and other reading materials should be prepared for the users ☐
 - h. New and current books, journals etc. should be added regularly to make library collection more effective ☐
 - i. Other _____

Section 4: Organization of the Library Collection

1. Are you satisfied with the classification, cataloguing and physical arrangements of books and other reading materials in your university library?
 - a. Yes ☐ b). No ☐ c) To some extent ☐
2. What kinds of problems do you face while searching a piece of information (Books, Journal etc.) in the collection of your university library? (Select as many as applicable)
 - a. Materials are not properly classified and catalogued ☐
 - b. Books are not placed in an organized manner on shelves ☐
 - c. Computerized catalogue is not available in the library ☐
 - d. Books are often scattered on shelves ☐
 - e. Library guides are not available ☐
 - f. Spine label writings soon fade away due to which materials cannot be identified and accessed. ☐
 - g. Other _____
3. Are you satisfied with the overall arrangements and environment of your university library?
 - a. Yes ☐ b). No ☐ c) To some extent ☐

Section 5: Promotion of the Library Collection

1. Are you satisfied with the strategies adopted for the promotion/marketing of collection (Books, Journal etc.) to the users' community in your university library?
 - a. Yes ☐ b). No ☐ c) To some extent ☐

2. What kinds of marketing strategies do you recommend/suggest for effective collection promotion to the users community in your university library? (Select as many as applicable)
- l. Information about library materials should be provided through orientation programs inviting students and faculty members to the central library ☐
 - m. Information about library materials should be provided to the users through arranging orientation programs in the respective departments/constituent institutions/colleges etc. ☐
 - n. List of new arrival should be displayed on the main entrance of the central library. ☐
 - o. List of new arrivals should be sent to the respective departments/constituent institutions/colleges etc. for display on their notice boards. ☐
 - p. University publications should be used for marketing library sources and services i.e. students' newspapers and newsletters etc. ☐
 - q. Information about new materials should be uploaded on university website ☐
 - r. Information should be sent to all students and faculty members via email alerts. ☐
 - s. Information should also be shared via social media i.e. face book, tweeter accounts etc. ☐
 - t. Other _____

Section 6: Applications of ICT in the Libraries and Access to HEC Digital Library

1. Are you satisfied with the provision of ICT facilities (computer, internet etc.) in your university library?
 - a. Yes ☐
 - b). No ☐
 - c) To some extent ☐
2. What measures do you suggest to improve ICT facilities in your university library? (Select as many as applicable)
 - a. Provision of computers for users service ☐
 - b. Provision of internet facility for users service ☐
 - c. Provision of heavy duty scanners for users service ☐
 - d. Provision of heavy duty printers for users service ☐
 - e. Provision of heavy duty photocopiers for users service ☐
 - f. Other _____
3. Are you satisfied with the provision of HEC Digital Library in your university library?
 - a) Yes ☐
 - b). No ☐
 - c) To some extent ☐
4. Are you satisfied with the efforts of library staff for HEC Digital Library's Promotion?
 - a. Yes ☐
 - b). No ☐
 - c) To some extent ☐
5. What measures do you suggest to improve/increase the usage of HEC Digital Library in your university library? (Select as many as applicable)
 - a. Through the arrangements of training and orientation programs for the users ☐
 - b. Improving internet speed ☐
 - c. Provision of latest versions of computers ☐
 - d. Other _____

Thank you very much for your time

Name _____

Designation _____

Signature _____

Stamp _____

Contact Numbers:

Office _____

Personal _____

Email _____

Appendix E

REQUEST LETTER AND SCHEDULE OF INTERVIEW FOR LIS

PROFESSIONALS



Dearest and Respected Sir/Madam

Assalam-o-Alaikum

In partial fulfilment of the requirements for my doctoral study in Library and Information Science at the Islamia University of Bahawalpur, I am conducting a study on “***Collection Management in the University Libraries: Policies, Procedures and Users’ Satisfaction***”. The need of this study arose from many factors i.e. shrinking budgets, rising costs and high demand of reading materials, high rate of printing of books and journals at international and low production of the same at national level, development of technologies, paradigm shift to digital and electronic resources, high need for resource sharing, research based ranking system of universities, the establishment of new universities and low production of scholarly publications on the subject motivated this work.

This research work would have multi-pronged advantages and benefits for the stakeholders of higher education sector in the province of Khyber Pakhtunkhwa in specific and Pakistan in general. This would be of great importance to the university administration (Vice Chancellors, Registrars, and Treasurers) and professional librarians who will largely benefit from the findings of this study to plan effective collection management strategies in their university libraries. It will investigate the existing collection management strategies and would suggest possible measures for improvement.

In the changing academic environment where new universities and institutions of higher education have been established and more are expected to be established in the near future in Khyber Pakhtunkhwa, this study will help as a guide for planning better policies and procedure for collection management in these institutions. This change also presupposes that there should be an infrastructure in place to enable academics and researchers to obtain the information they need.

This study requires the collection of data by various methods including interviews. Being a LIS professional of an eminent institute you have been selected to participate in this survey. I am also well aware of your professional engagements and other academic and personal assignments, but your cooperation is imperative to the successful completion of my study.

Yours Sincerely,

Ghalib Khan

PhD Student

Department of Library and Information Science, The Islamia University of Bahawalpur

03339277414

ghalibkhan1@yahoo.com

Appendix F**INTERVIEW SCHEDULE FOR LIS PROFESSIONALS**

A. Users' Needs Assessment

1. Do you assess users' needs for collection management?

2. How frequently do you assess users' needs?

3. What kinds of problems do you face while conducting users' needs assessments?

4. Do you recommend users' needs assessments for effective collection management?

B. Collection Development Policy

1. Does your library have a written Collection Development Policy?

2. What are the main problems in the formulation of Collection Development Policy?

3. Do you think written collection development policies are necessary for university libraries?

C. Selection

1. In which subject area do you select? (Select as many as applicable)

2. What is the nature of selection in your institution?

3. Which materials are easy to select?

4. In which format are users' mostly interested?

5. While selecting an e-resource do you evaluate it?

6. Do you accept requests to purchase new materials? If "yes" how many purchase requests (on the average) do you receive per month?

7. What are the bases for the selection of materials?

8. What is the proportionate of selection of materials?

9. What kinds of problem you face in the selection of materials?

D. Acquisition

1. Does your university library have an acquisition department?

2. Does your university library have a written acquisition policy?

3. Do you acquire materials from foreign countries?

4. Do you face problems while acquiring foreign materials from abroad? If “yes” what are those problems?

5. Do you think equal participation is given to acquisition staff in the process of book selection? If “yes” are you satisfied with this participation?

6. Which materials are easy to acquire?

E. Gifts and Donations

1. Does your library accept gifts? If “yes” do you have any policy for accepting gifts?

2. Does your library receive donations? If “yes” do you use them for the purchase of books and other reading materials?

3. How much money does your library get as donation per annum?

F. Budgeting and Fiscal Management

1. Does your university have an adequate funding policy for library collection management?

2. Is there specific budget allocation for your library on annual basis?

3. What is the type of this budget?

4. Please mention your library budget for the following years?

a. 2013 Rs. _____ b. 2012 Rs. _____

c. 2011 Rs. _____ d. 2010 Rs. _____

e. 2009 Rs. _____

5. Do university budget cuts have put an impact on the collection management of your university library? If “yes” what are those effects please mention.

6. Do you have emergency plans to cope up with budget cuts and other relevant issues? If “yes” please name those plans

7. Does your library have any agreement with funding agencies for the acquisition/purchase of books/reading materials, staff training and other skills development programs? If “yes” do they regularly support you?

G. Bibliographic Access and Physical Preparation

1. Does your university library have a technical section responsible for cataloging and classification to provide bibliographic access to library holdings?

2. What kind of access is available to your library collection?

3. Does your library have a web page or subject guide available through your institution’s web site? If “yes” do you update it regularly regarding your collection management?

H. Marketing the Collection to Users

1. Do you have strategies for marketing your library collection to users' community?

2. Do you have budget allocation for marketing library resources?

I. Evaluation of the Collection

1. Do you periodically assess your library collection?

2. How do you carry out this process?

3. Do you assess electronic resources?

J. Weeding

1. Does your library have a weeding policy for books and other reading materials?

2. After how many years do you prefer weeding out materials?

3. What types of materials are weeded out?

4. Do you have enough space to accommodate all kinds of books and other reading materials in your library? If “No” do you have space problem?

K. Resource Sharing Program

1. Are you engaged in any kind of resource sharing program? If “yes” is it under some consortia or exchange program?

2. What is the level of your resource sharing program?

3. What kinds of materials are mostly shared/ exchanged?

4. Do you think cooperative collection development and resource sharing is helpful for libraries to overcome/reduce the cost of acquiring journals, books, and electronic materials?

L. Preservation and Conservation of Collection

1. Does your library have disaster management planning?

M. Impact of ICT and HEC Digital Library on Collection Management

1. What type of ICT training have you attended to improve collection management in library?

2. To what extent have you benefited from IT facilities?

3. Do you think HEC digital library program is an effective tool to fulfill the information needs of faculty and researchers in your university?

4. Does your library have access to HEC digital resources?

5. Do you provide trainings/orientation programs to users for operating HEC digital library and other electronic resources? If “Yes” what methods do you apply for HEC digital library use?

N. Additional Information

1. Please also inform me about the Library Committee, if any in your university comprising faculty members. Do they play their role in library matters or they are just sleeping partners and all matters are handled by the library staff.

2. Recommendation for further development of Collection Management in the University Libraries of Khyber Pakhtunkhwa.

Name _____

Designation _____

Address (office) _____

Phone _____ Fax _____ Email _____

Thank you very much

Appendix G

**REQUEST LETTER AND SCHEDULE OF INTERVIEW FOR SENIOR LIS
EDUCATIONALISTS**



Dearest and Respected Sir/Madam

Assalam-o-Alaikum

In partial fulfilment of the requirements for my doctoral study in Library and Information Science at the Islamia University of Bahawalpur, I am conducting a study on “***Collection Management in the University Libraries: Policies, Procedures and Users’ Satisfaction***”. The need of this study arose from many factors i.e. shrinking budgets, rising costs and high demand of reading materials, high rate of printing of books and journals at international and low production of the same at national level, development of technologies, paradigm shift to digital and electronic resources, high need for resource sharing, research based ranking system of universities, the establishment of new universities and low production of scholarly publications on the subject motivated this work.

This research work would have multi-pronged advantages and benefits for the stakeholders of higher education sector in the province of Khyber Pakhtunkhwa in specific and Pakistan in general. This would be of great importance to the university administration (Vice Chancellors, Registrars, and Treasurers) and professional librarians who will largely benefit from the findings of this study to plan effective collection management strategies in their university libraries. It will investigate the existing collection management strategies and would suggest possible measures for improvement.

In the changing academic environment where new universities and institutions of higher education have been established and more are expected to be established in the near future in Khyber Pakhtunkhwa, this study will help as a guide for planning better policies and procedure for collection management in these institutions. This change also presupposes that there should be an infrastructure in place to enable academics and researchers to obtain the information they need.

This study requires the collection of data by various methods including interviews. Being a library and information science educationalist you have been selected to participate in this survey.

I am also well aware of your professional engagements and other academic and personal assignments, but your cooperation is imperative to the successful completion of my study.

Yours Sincerely,

Ghalib Khan

PhD Student

Department of Library and Information Science, The Islamia University of Bahawalpur

03339277414

ghalibkhan1@yahoo.com

Appendix H

INTERVIEW SCHEDULE FOR SENIOR LIS EDUCATIONALISTS

A: Collection Management

1. How do you see the present status of collection management in the University Libraries of Khyber Pakhtunkhwa?

2. Do you think university libraries in Khyber Pakhtunkhwa are effective with respect to collection, services and facilities in promoting research and academic activities?

3. What kinds of policies do you prefer for collection management in the university libraries of Khyber Pakhtunkhwa?

4. Collection Management is a vogue term among the professional librarians community of Khyber Pakhtunkhwa, in your opinion what are the main reasons?

5. Being a senior faculty what measures do you suggest uniform collection management policies in the university libraries of Khyber Pakhtunkhwa?

B: Collection Development Policies

1. Do you see any role of written collection development policies in the university libraries of Khyber Pakhtunkhwa?

-
-
2. How can university libraries frame a uniform collection development policy?

C: Librarians & Faculty Members Collaboration for Effective Collection Management

1. There is a high gap of communication between the librarians' community and teaching faculty, leaving an impact on the collection management of university libraries, in your opinion, what measures should be taken to bridge up this gap?

D: Budgeting and Fiscal Management

1. Do you think budget cuts on the universities have placed a grave impact on the collection management of university libraries of Khyber Pakhtunkhwa?

2. What alternative strategies should be adopted by the university libraries to cope up with the financial issues of the current situation?

E: Bibliographic Access & Marketing of Collection to the Users

1. What kind of access should be provided to the library collections?

2. What marketing strategies should be adopted by the professional librarians to promote library collection for maximum and effective usability and accessibility?

F: Research Based Ranking System of Universities

1. Research based ranking system of universities: What should be the role of university libraries in this aftermath?

2. Establishment of new universities: What are the Issues and challenges for librarians in Khyber Pakhtunkhwa?

G: Information and Communication Technologies and HEC Digital Library Program

1. What is the impact of ICT on the collection management of the university libraries of Khyber Pakhtunkhwa?

2. What is the impact of HEC Digital Library program and its impact on the collection management of university libraries in the province?

H: Resource Sharing Programs

1. Absence of Resource sharing programs in the university libraries of Khyber Pakhtunkhwa, what are the available options?

I: Weeding

1. Do you recommend weeding of library books and other reading materials in the university libraries to keep reading materials up to date and resolve the space issues?

J: Needed Competences for Professional librarians

1. What competencies are required for professional librarians to handle the present hybrid culture of libraries?

Thank you very much

Appendix I

LIST OF PUBLIC SECTOR UNIVERSITIES SURVEYED

S. No	Name of University
1.	Abdul Wali Khan University, Mardan
2.	Frontier Women University, Peshawar
3.	Gomal University, D.I. Khan
4.	Hazara University, Dodhial, Mansehra
5.	Islamia College University, Peshawar
6.	Khyber Medical University, Peshawar
7.	Kohat University of Science and Technology, Kohat
8.	Khyber Pakhtunkhwa Agricultural University, Peshawar
9.	NWFP University of Engineering. & Technology, Peshawar
10.	Shaheed Benazir Bhutto University, Sheringal, Dir
11.	University of Malakand, Chakdara, Dir, Malakand
12.	University of Peshawar, Peshawar
13.	University of Science & Technology, Bannu
14.	University of Swat, Swat
15	University of Haripur, Haripur
16	Universit of Swabi, Swabi
17	Bacha Khan University, Charsadda

Appendix J

LIST OF PRIVATE SECTOR UNIVERSITIES SURVEYED

S. No	Name of University
1.	Abasyn University, Peshawar
2.	CECOS University of Information Technology & Emerging Sciences, Peshawar
3.	City University of Science and Information Technology, Peshawar
4.	Gandhara University, Peshawar
5.	Iqra National University, Peshawar
6.	Northern University, Nowshera
7.	Preston University, Kohat
8.	Qurtaba University of Science and Information Technology, D.I. Khan
9.	Sarhad University of Science and Information Technology, Peshawar

Appendix K
LIST OF INTERVIEWEES

LIST OF INTERVIEWEES
Library and Information Professionals

1. Mr. Wajahat Ali Khan
2. Mr. Rafiq Javid
3. Mr. Kashif Jan
4. Mr. Ameer Nawas Khan
5. Mr. Israr Khan
6. Mr. Muhammad Ibrar
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Appendix L
LIST OF ABBREVIATIONS

List of Abbreviations

Full Name/Title	Abbreviation
American Library Association	ALA
American Psychological Association	APA
Association of College and Research Libraries	ACRL
British Library Document Delivery Service	BLDDS
Collection Development Policy	CDP
Collection management	CM
Cooperative Collection Development	CCD
Degree Awarding Institutions	DAIs
Dera Ismail Khan	DI Khan
Electronic Library Information Navigator	ELIN
Federally Administrated Areas	FATA
HEC Scholars Publication	HSP
HEC-National Digital Library Programme	HEC-NDL
Higher Education Archive and Libraries	HEAL
Higher Education Commission	HEC
Higher Education Department	HED
Higher Education Regularity Authority	HERA
Information and Communication Technologies	ICT
Intellectual Property Rights	IPR
International Network for the Availability of Scientific Publications	INASP
Internet Protocol	IP
Khyber Pakhtunkhwa	KPK
Library and Information Science	LIS

Local Area Networking	LAN
National Book Foundation	NBF
North West Frontier Province	NWFP
Online Public Access Catalogue	OPAC
Pakistan Education Research Network	PERN
Pakistan Library Association	PLA
Pakistan Research Repository	PRR
Program for the Enhancement of Research Information	PERI
Resource Sharing	RS
Secure Electronic Delivery	SED
Wide Area Networking	WAN

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